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AN EXPERIMENTAL INVESTIGATION OF GAPWISE
PERIODICITY AND UNSTEADY AERODYNAMIC
RESPONSE IN AN OSCILLATING CASCADE
VOL. II: DATA REPORT

(Part 1: Text and Mode 1 Data)

F. O. Carta

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December 1981



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16. Abstract <p>Tests were conducted on a linear cascade of airfoils oscillating in pitch to measure the unsteady pressure response on selected blades along the leading edge plane of the cascade, over the chord of the center blade, and on the sidewall in the plane of the leading edge. The tests were conducted for all 96 combinations of 2 mean camberline incidence angles ($\alpha_{MCL} = 2$ and 6 deg), 2 pitching amplitudes ($\alpha = 0.5$ and 2 deg), 3 reduced frequencies ($k = .072, .122$, and $.151$ based on semi chord), and 8 interblade phase angles ($\sigma = 0, \pm 45, \pm 90, \pm 135, 180$ deg). The pressure data were reduced to Fourier coefficient form for direct comparison, and were also processed to yield integrated loads and, particularly, the aerodynamic damping coefficient.</p> <p>The experimental results of this program are presented in two volumes. The first volume (NASA CR 3513) describes the test procedure, discusses key results from the experiment, and provides a cursory comparison of experimental data and theoretical predictions. The present volume, in two parts, is a compilation of all data obtained during the test program, reproduced from the printout of the data reduction program. A further description of the contents of this report is found in the text that follows.</p>					
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VOL. II: DATA REPORT

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SUMMARY

Tests were conducted on a linear cascade of airfoils oscillating in pitch to measure the unsteady pressure response on selected blades along the leading edge plane of the cascade, over the chord of the center blade, and on the sidewall in the plane of the leading edge. The tests were conducted for all 96 combinations of 2 mean camberline incidence angles ($\alpha_{MCL} = 2$ and 6 deg), 2 pitching amplitudes ($\alpha = 0.5$ and 2 deg), 3 reduced frequencies ($k = .072, .122,$ and $.151$ based on semi chord), and 8 interblade phase angles ($\sigma = 0, \pm 45, \pm 90, \pm 135, 180$ deg). The pressure data were reduced to Fourier coefficient form for direct comparison, and were also processed to yield integrated loads and, particularly, the aerodynamic damping coefficient.

The experimental results of this program are presented in two volumes. The first volume (Ref. 1) describes the test procedure, discusses key results from the experiment, and provides a cursory comparison of experimental data and theoretical predictions. The present volume, in two parts, is a compilation of all data obtained during the test program, reproduced from the printout of the data reduction program. A further description of the contents of this report is found in the text that follows.

LIST OF SYMBOLS

Note: In this tabulation the first column is the heading from the computer printout reproduced herein, the second column is the equivalent physical symbol defined in Ref. 1, and these are followed by a brief definition.

<u>Symbol in this report</u>	<u>Symbol in Ref. 1</u>	<u>Definition</u>
ALPHA-BAR	$\bar{\alpha}$	pitching amplitude, deg
ALPHA-MCL	α_{MCL}	mean camberline incidence angle, deg
CMIMAG	C_{M_I}	imaginary part of moment coefficient per unit amplitude
CMREAL	C_{M_R}	real part of moment coefficient per unit amplitude
CM-MAG	\bar{C}_M	magnitude of moment coefficient per unit amplitude
CNIMAG	C_{N_I}	imaginary part of normal force coefficient per unit amplitude
CNREAL	C_{N_R}	real part of normal force coefficient per unit amplitude
CN-MAG	\bar{C}_N	magnitude of normal force coefficient per unit amplitude
CPIMAG	C_{P_I}	imaginary part of single surface pressure coefficient per unit amplitude
CPREAL	C_{P_R}	real part of single surface pressure coefficient per unit amplitude
CP-MAG	\bar{C}_P	magnitude of single surface pressure coefficient per unit amplitude
DELCP_I	ΔC_{P_I}	imaginary part of pressure difference coefficient per unit amplitude
DELCPM	$\Delta \bar{C}_P$	magnitude of pressure difference coefficient per unit amplitude
DELCPR	ΔC_{P_R}	real part of pressure difference coefficient per unit amplitude

LIST OF SYMBOLS (Cont'd)

<u>Symbol in this report</u>	<u>Symbol in Ref. 1</u>	<u>Definition</u>
FILE	-	internal file number, used for computer access
K	k	reduced frequency
N	k	harmonic number
PHI	ϕ	phase angle lead relative to motion
PHIM	ϕ_M	moment phase angle lead relative to motion
PHIN	ϕ_N	normal force phase angle lead relative to motion
PDP RUN.PT	-	internal computer reference number
POINT	-	point number assigned during test
Q-COMP	q	dynamic pressure
RUN	-	run number assigned during test
SIGMA	σ	interblade phase angle
V-REF	V	reference velocity at blade 6
X	χ	dimensionless distance along chord
XI	Ξ	aerodynamic damping parameter

Supplementary Notes:

- All pressures are normalized with respect to $Q\text{-COMP} = q$ and $\text{ALPHA-BAR} = \bar{\alpha}$ (in radians)
- The notation UPPER or LOWER in MODE 1 refers to the blade surface and pertains to the column of numbers beneath this notation
- The notation SUCTION or PRESSURE in MODE 2 refers to the blade surface and pertains to the tabulations to the right of this notation
- UPPER = SUCTION, LOWER = PRESSURE
- The values set equal to $X = \%$ are the chord fractions at which the measurements were made
- Imaginary part is out of phase and real part is in phase with the pitching motion.

DISCUSSION

The experimental procedures used and the results obtained from this program are both fully described in the companion technical report volume (Ref. 1). The objective of this data report is to provide full documentation for this experiment, in the form of reproduced computer printout of the data reduction program. However, for completeness, a brief description of the test program, model airfoils, and instrumentation will be included.

Oscillating Cascade Wind Tunnel

The experimental program was carried out in the UTRC linear subsonic Oscillating Cascade Wind Tunnel (OCWT). The test section of this facility is 25.4 cm (10 in) wide and 68.6 cm (27 in) high, and the sidewall configuration is currently arranged to accept 11 shaft-mounted blades in cascade. The bearing mounts for these blades are equally placed along a line making a 30 deg angle with respect to the tunnel floor, and hence the sidewall stagger angle of the OCWT is nominally 30 deg. The distance between blade shaft centers along the stagger line is 11.43 cm (4.5 in).

Test Airfoils

The cascade configuration consists of eleven NACA 65-series blades, each having a chord of $c = 15.24$ cm (6 in) and a span of 25.4 cm (10 in), with a 10 degree circular arc camber and a thickness-to-chord ratio of 0.06. The slant gap, measured along the blade-to-blade stagger line, is $\tau = 11.43$ cm (4.5 in) so the gap-to-chord ratio is $\tau/c = 0.75$.

For these tests the blade stagger angle, β_1^* , measured between the tangent to the blade mean camber line at the leading edge and the leading edge locus line, is 30 deg. The blade inlet angle, β_1 , is measured between the inlet velocity, V , and the leading edge locus line. Hence, the mean camber line incidence angle is defined as $\alpha_{MCL} = \beta_1^* - \beta_1$. The blade profile coordinates, in fraction of chord, are contained in Table 1. The entire set of airfoils is coherently driven in a sinusoidal pitching motion with an amplitude of α .

Instrumentation

Conventional pneumatic wind tunnel instrumentation is used to measure the flow properties in the test section. A pitot probe downstream of the inlet honeycomb measures the total pressure in the tunnel, and sidewall static taps, aligned with the sidewall stagger angle, are used to measure the static pressure along the inlet and exit planes of the cascade. Tunnel speed is set by measuring the inlet plane static pressure at tunnel midheight and referring it to the pitot pressure to calculate the dynamic pressure, q .

The center airfoil (blade no. 6) was extensively instrumented to provide measurements of several flow parameters. Ten miniature high response pressure transducers were placed on each surface of the airfoil to obtain measurements of unsteady static pressures. This blade is shown schematically in Fig. 1.

Five other blades were also instrumented with miniature transducers. The blades are located in the cascade as shown in the schematic diagram in Fig. 2. Blade no. 6 is the fully instrumented center blade. Partial instrumentation was placed on blades no. 3, 4, 5, 7, and 9. Locations, in chord fraction, χ , of all transducer orifices are listed for all blades in Table 2a. As shown, blades 3, 5, 7, and 9 have suction surface orifices at $\chi = .0120$, and $.0622$, and pressure surface orifices at $\chi = .0120$. Blade 4 also has suction surface orifices at $\chi = .0120$ and $.0622$ and has additional suction surface orifices at $\chi = .0050$ and $.0350$ with no orifice on the pressure surface.

Finally, an array of ten miniature transducers were mounted in the tunnel sidewall in the plane of the blade leading edges, as shown schematically in Fig. 3. (For simplicity these locations are depicted as being slightly forward of the leading edge plane although they were actually coincident with the plane.) The gap fraction location, η , of each transducer relative to the suction surface of blade 6 is listed in Table 2b.

Test Plan

A total of 96 test conditions were run. These were comprised of all possible combinations of two mean camber line incidence angles ($\alpha_{MCL} = 2 \text{ deg}, 6 \text{ deg}$), two pitching amplitudes ($\alpha = 0.5, 2 \text{ deg}$) three frequencies ($f = 9.2, 15.5, 19.2 \text{ Hz}$, and, for a constant velocity of 61 m/sec , or 200 ft/sec , this was equivalent to reduced frequencies $k = c\omega/2V = \pi cf/V = .072, .122, .151$) and eight interblade phase angles ($\sigma = 0 \text{ deg}, \pm 45 \text{ deg}, \pm 90 \text{ deg}, \pm 135 \text{ deg}, 180 \text{ deg}$). In addition, two data runs were taken at each test condition. This was necessary because the number of desired data locations (47) exceeded the number of available data system channels (26). Hence, a relay was employed to switch between Mode 1, which contained all twenty blade-6 channels, five wall channels, and blade motion, and Mode 2, which contained all nineteen blade leading edge channels, six wall channels, and blade motion. Redundancy between modes was confined to the three leading edge stations on blade 6, one sidewall station, and blade motion. A tabulation of all data channels for each mode is contained in Table 3. In this table, the blade location is coded by a three symbol array denoting blade number, suction or pressure surface, and location sequence from leading edge. Wall stations are numbered consecutively. The numerical value for each location is either blade chord fraction, χ , or sidewall gap fraction, η .

Unsteady Data

The acquisition rate for all unsteady data was set at 1000 samples/sec. Thus, for the three nominal test frequencies, $f = 9.2, 15.5, 19.2$ Hz, there were 9.4, 15.9, and 19.7 cycles of data available for analysis, or conservatively, there were 9, 15, and 19 full cycles available. Data for each channel were Fourier analyzed, primarily to provide first, second, and third harmonic results for ease in analyses, but also to provide a compact means of data storage for subsequent use. These data have been completely tabulated in this data report. In each case a total of 10 harmonics are displayed for each unsteady channel.

Unsteady data for each pressure channel were reduced to dimensionless time history form by successive multiplications of the raw output (in computer counts) by the calibration constant for each channel (volt/count) and the calibration constant for each transducer (psi/volt); the results were then divided by the wind tunnel free stream dynamic pressure (psi) and by the blade pitching amplitude (rad). All results are harmonically referenced to the blade pitching motion (via Fourier analysis), and are normalized with respect to pitching amplitude.

Data Tabulations

All unsteady data, in reduced and normalized form, are contained in Tables 4 through 11. Mode 1 data are contained in this part of the data report in Tables 4 through 7, and Mode 2 data are contained in Part 2 of the data report in Tables 8 through 11. The sequence in each mode group is $\alpha = 2 \pm 0.5$ deg (Tables 4, 8), $\alpha = 2 \pm 2$ deg (Tables 5, 9), $\alpha = 6 \pm 0.5$ deg (Tables 6, 10), and $\alpha = 6 \pm 2$ deg (Tables 7, 11). Within each table are all combinations of interblade phase angle, σ , and reduced frequency, k , for which data were taken, as listed at the beginning of each table. All notation used in these tables is fully defined in the list of symbols in terms of the original notation of Ref. 1. For each parameter pair (σ and k), there are four pages of printout. These are different for each mode, and are described separately below.

Mode 1 tables contain primarily center blade data with integrated loads and some sidewall data on the third and fourth pages. Pages 1 and 2 of each set have single surface pressure data for each chordwise location, with 10 harmonics listed vertically for each item printed (N is harmonic number). The first page lists real and imaginary parts and the second page lists amplitude and phase angle of these single surface results. Pages 3 and 4 of each set contain differential pressure results for all ten chordwise locations. In addition, there are lists of normal force coefficient, moment coefficient, the integrated aerodynamic damping parameter, and a group of single surface sidewall pressures. The third page has all harmonic lists in real and imaginary form while the fourth page presents these as amplitudes and phase angles.

Mode 2 tabulations are more graphical in that the data arrangement on each pair of pages is akin to the relative locations of the measurement stations in physical space. Pages 1 and 2 of each set contain real and imaginary parts and pages 3 and 4 of each set contain amplitudes and phase angles. For each pair of pages (arranged as facing pages in the tables, for convenience) blade number, and hence cascade location, is distributed lengthwise

on each page, while chordwise position on each blade is distributed crosswise on each page. (Note the isolated data for blade 4 at $x = .005$ and $.030$ on the suction surface, and the missing data for this blade at $x = .012$ on the pressure surface.) A single array of sidewall data is presented at the bottom of the tabulation on each pair of pages. To obtain the complete sidewall distribution for any desired combination of parameters, the reader should arrange the sidewall data from the appropriate pair of Mode 1, Mode 2 printouts in ascending order of gap fraction. (In such a case, it will be found that the run number is identical and the point numbers are consecutive.)

REFERENCE

1. Carta, F. O.: An Experimental Investigation of Gapwise Periodicity and Unsteady Aerodynamic Response in an Oscillating Cascade. Vol. I: Experimental and Theoretical Results. NASA CR 3513, 1982.

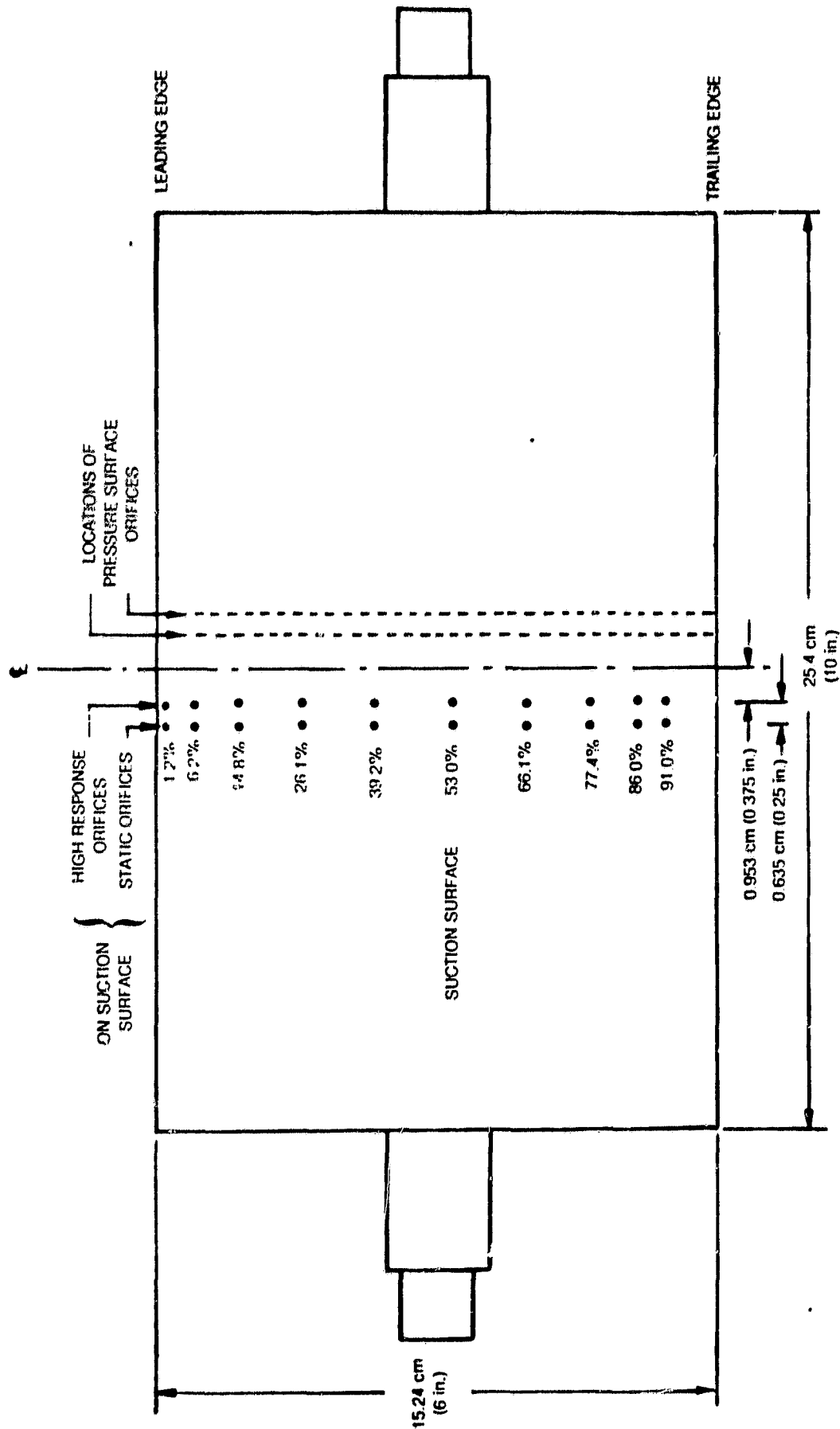


Figure 1 Schematic Plan View of Instrumented Airfoil

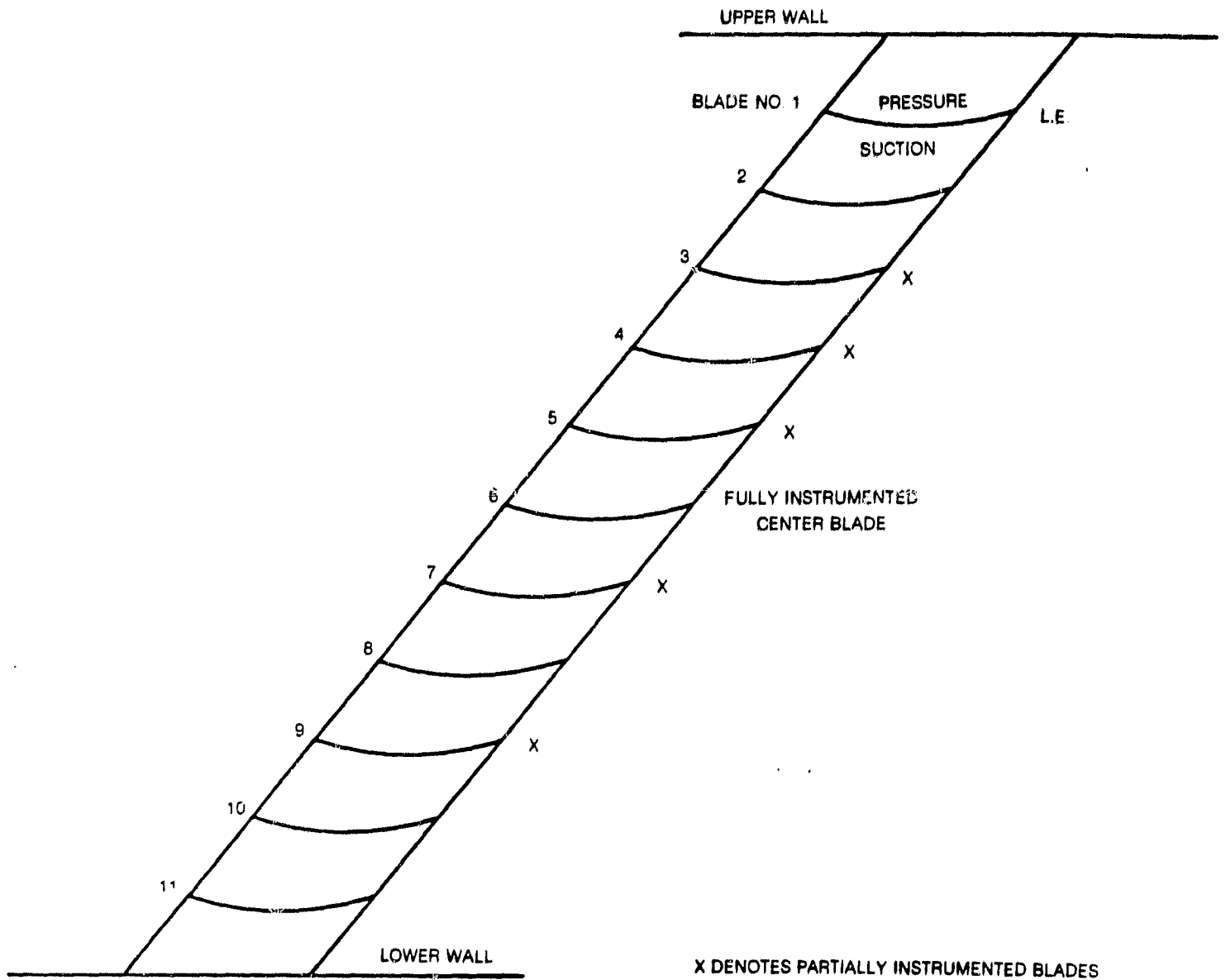


Figure 2 Schematic of Cascade Showing Instrumented Blades

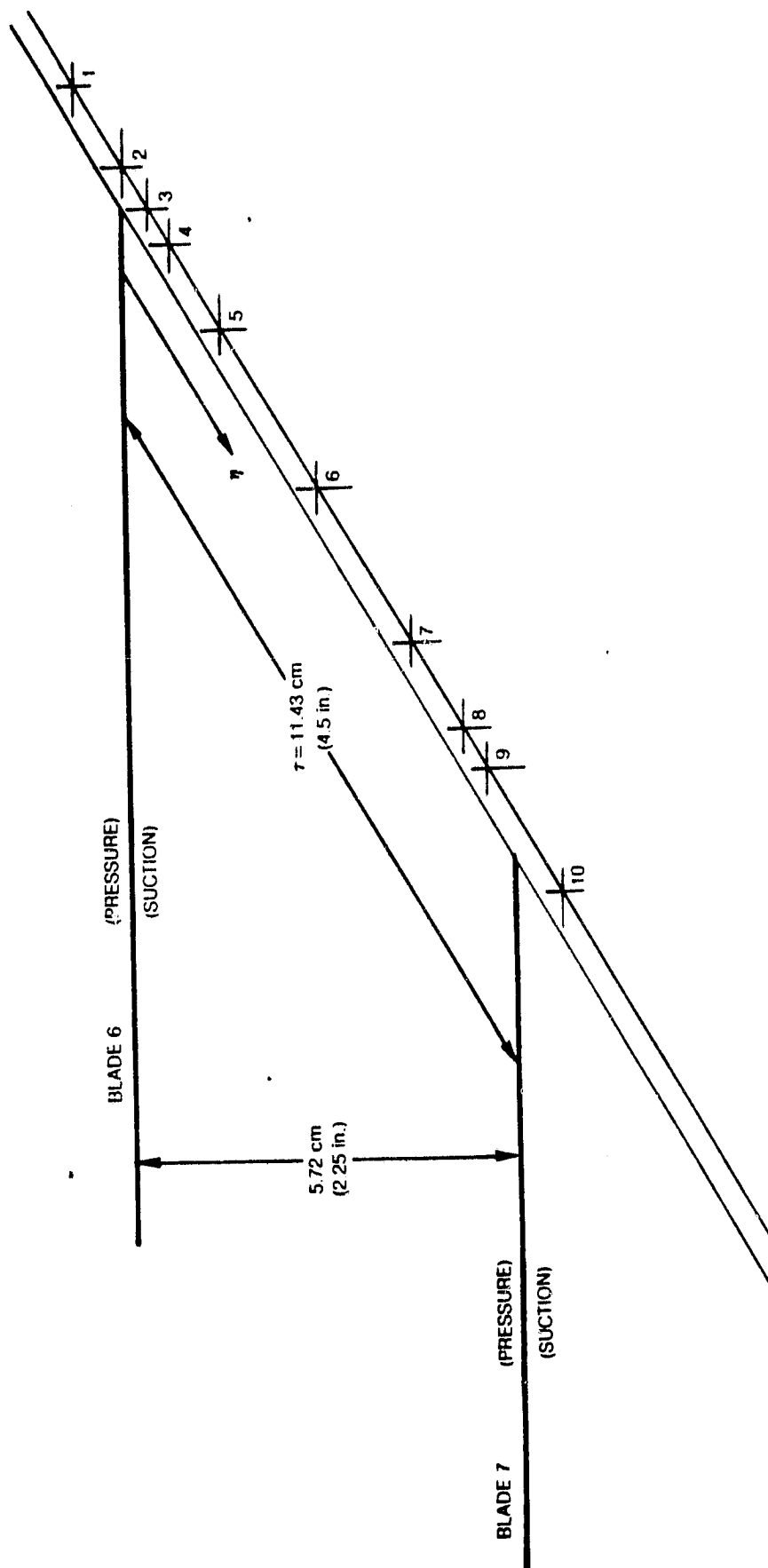


Figure 3 Sidewall Transducer Array

TABLE 1
DIMENSIONLESS AIRFOIL COORDINATES IN FRACTION OF CHORD

$c = 15.24 \text{ cm (6 in.)}$

SUCTION SURFACE		PRESSURE SURFACE	
X	+y/c	X	-y/c
.0008	.0020	.0012	.0019
.0046	.0053	.0054	.0042
.0070	.0064	.0080	.0050
.0120	.0083	.0130	.0061
.0244	.0116	.0256	.0077
.0494	.0164	.0507	.0098
.0743	.0204	.0757	.0115
.0993	.0237	.1007	.0129
.1494	.0290	.1506	.0150
.1994	.0331	.2006	.0165
.2495	.0364	.2505	.0177
.2996	.0387	.3004	.0185
.3998	.0411	.4002	.0188
.5000	.0406	.5000	.0176
.6002	.0370	.5998	.0146
.7003	.0306	.6997	.0104
.8003	.0223	.7997	.0069
.8503	.0176	.8497	.0053
.9003	.0127	.8997	.0040
.9502	.0078	.9497	.0032
.9975	.0030	.9973	.0025

RADIUS CENTER COORDINATES	
L. E. RADIUS/c = .0024	X = .0024, y/c = .0002
T. E. RADIUS/c = .0028	X = .9972, y/c = .0003

TABLE 2

**TRANSDUCER ORIFICE LOCATIONS
(FRACTION OF CHORD)**

a) Blade Transducers, Fractions of Chord

Blade Number	Values of X	
	Suction Surface	Pressure Surface
6	.0120	.0120
	.0622	.0622
	.1478	.1478
	.2612	.2612
	.3924	.3924
	.5297	.5297
	.6608	.6608
	.7742	.7742
	.8598	.8598
	.9100	.9100
3,5,7,9	.0120	.0120
	.0622	
4	.0050	
	.0120	
	.0350	
	.0622	

**b) Sidewall Transducers, Gap Fraction
From Blade 6 Suction Surface**

Wall Station Number	Gap Fraction η
1	-.125
2	.0
3	.062
4	.125
5	.25
6	.50
7	.75
8	.875
9	.938
10	1.125

TABLE 3
BLADE DATA CHANNELS

ATLAS CHANNEL NUMBER	MODE 1		MODE 2	
	BLADE OR WALL LOCATION	χ or η	BLADE OR WALL LOCATION	χ or η
1*	α	-	α	-
2*	6S1	.0120	6S1	.0120
3*	6S2	.0622	6S2	.0622
4	6S3	.1478	3S1	.0120
5	6S4	.2612	3S2	.0622
6	6S5	.3924	3P1	.0120
7	6S6	.5297	4S1	.0050
8	6S7	.6608	4S2	.0120
9	6S8	.7742	4S3	.0350
10	6S9	.8598	4S4	.0622
11	6S10	.9100	5S1	.0120
12*	6P1	.0120	6P1	.0120
13*	6P2	.0622	5S2	.0622
14	6P3	.1478	5P1	.0120
15	6P4	.2612	7S1	.0120
16	6P5	.3924	7S2	.0622
17	6P6	.5297	7P1	.0120
18	6P7	.6608	9S1	.0120
19	6P8	.7742	9S2	.0622
20	6P9	.8598	9P1	.0120
21	6P10	.9100	W3	.062
22	W1	-.125	W5	.250
23	W2	.000	W7	.750
24*	W4	.125	W4	.125
25	W6	.500	W8	.875
26	W10	1.125	W9	.938

* DENOTES REDUNDANT CHANNEL

NOTES: • Blade location notation ---

3S2 → blade 3, suction surface, second
transducer aft of leading edge
(P denotes pressure surface)

• Transducer location values ---

χ is blade chord fraction
 η is sidewall gap fraction

TABLE 4

MODE 1 DATA FOR $\alpha_{MCL} = 2 \text{ deg}$, $\bar{\alpha} = 0.5 \text{ deg}$

<u>σ (deg)</u>	<u>k</u>	<u>page</u>
-135	.0714	18
"	.1230	22
"	.1523	26
-90	.0719	30
"	.1225	34
"	.1520	38
-45	.0715	42
"	.1225	46
"	.1514	50
0	.0715	54
"	.1210	58
"	.1503	62
45	.0722	66
"	.1219	70
"	.1526	74
90	.0716	78
"	.1219	82
"	.1507	86
135	.0717	90
"	.1227	94
"	.1526	98
180	.0714	102
"	.1213	106
"	.1504	110

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 70 ALPHA-RCR = 2.0 POP RUN PI 15.05
POINT 15 ALPHA-RCR = 135.0 Q-COMP = 200.12
COMPUTED FREQUENCY = 9.10, K = .0714
V-DEF = 200.12

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

N	X	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	140-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	1	1.049	1.126	1.008	1.008	1.008	1.008	1.008
2	2	1.579	1.812	1.579	1.579	1.579	1.579	1.579
3	3	1.876	1.868	1.876	1.876	1.876	1.876	1.876
4	4	1.232	1.336	1.232	1.232	1.232	1.232	1.232
5	5	1.166	1.340	1.166	1.166	1.166	1.166	1.166
6	6	1.066	1.340	1.066	1.066	1.066	1.066	1.066
7	7	1.034	1.340	1.034	1.034	1.034	1.034	1.034
8	8	1.019	1.340	1.019	1.019	1.019	1.019	1.019
9	9	1.009	1.340	1.009	1.009	1.009	1.009	1.009
10	10	1.000	1.340	1.000	1.000	1.000	1.000	1.000

N	X	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	140-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	1	1.049	1.126	1.008	1.008	1.008	1.008	1.008
2	2	1.579	1.812	1.579	1.579	1.579	1.579	1.579
3	3	1.876	1.868	1.876	1.876	1.876	1.876	1.876
4	4	1.232	1.336	1.232	1.232	1.232	1.232	1.232
5	5	1.166	1.340	1.166	1.166	1.166	1.166	1.166
6	6	1.066	1.340	1.066	1.066	1.066	1.066	1.066
7	7	1.034	1.340	1.034	1.034	1.034	1.034	1.034
8	8	1.019	1.340	1.019	1.019	1.019	1.019	1.019
9	9	1.009	1.340	1.009	1.009	1.009	1.009	1.009
10	10	1.000	1.340	1.000	1.000	1.000	1.000	1.000

N	X	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	140-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	1	1.049	1.126	1.008	1.008	1.008	1.008	1.008
2	2	1.579	1.812	1.579	1.579	1.579	1.579	1.579
3	3	1.876	1.868	1.876	1.876	1.876	1.876	1.876
4	4	1.232	1.336	1.232	1.232	1.232	1.232	1.232
5	5	1.166	1.340	1.166	1.166	1.166	1.166	1.166
6	6	1.066	1.340	1.066	1.066	1.066	1.066	1.066
7	7	1.034	1.340	1.034	1.034	1.034	1.034	1.034
8	8	1.019	1.340	1.019	1.019	1.019	1.019	1.019
9	9	1.009	1.340	1.009	1.009	1.009	1.009	1.009
10	10	1.000	1.340	1.000	1.000	1.000	1.000	1.000

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

**FILE
RUN
POINT**

PHA-MCL = 2.0
 PHA-PAR = .5
 SIGMA = -135.

RUN-PT 15.05
 COMP 32.550
 -REF 209.12

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED FREQUENCY

[illegible]

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 79 ALPHA-MCL = 2.0 POP RUN-PT 15.05
RUN 15 ALPHA-BAR = .5 Q-COMP = 32550
POINT 1 SIGMA = -135. V-PEF = 200.12
COMPUTED FREQUENCY = 9.13, K = .0714
AND PHASE ANGLE =

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
--- BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ---

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.290	190.37	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
2	5.521	207.78	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
3	7.752	225.19	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
4	9.983	242.60	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
5	12.214	260.01	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
6	14.445	277.42	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
7	16.676	294.83	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
8	18.907	312.24	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
9	21.138	329.65	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
10	23.369	347.06	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.290	190.37	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
2	5.521	207.78	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
3	7.752	225.19	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
4	9.983	242.60	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
5	12.214	260.01	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
6	14.445	277.42	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
7	16.676	294.83	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
8	18.907	312.24	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
9	21.138	329.65	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53
10	23.369	347.06	19.323	140.15	9.740	146.92	6.595	350.87	4.123	169.53

--- STABILITY PARAMETER ---

--- WALL PRESSURES, PER RADIAN ---

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

MODE 1 -- OCW PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 72 ALPHA-MCL = 2.0 POP MUN.PI 15.07
MUN 13 ALPHA-PAP = 5 Q-COMP = .32172
POINT 3 SIGMA = -135. V-PEF = 198.94
COMPUTED FREQUENCY = 15.57, M = .1230
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG				
1	17	253	5.559	-7.496	2.178	-4.360	-.955	-2.827	196	-2.068	-2.998	-2.855
2	30	130	-.368	-.130	-.295	-.124	-.281	-.340	-.101	-.264	-.098	-.300
3	182	-.254	-.189	-.127	-.218	-.197	-.220	-.330	-.037	-.261	-.190	-.300
4	114	-.086	-.046	-.074	-.074	-.129	-.074	-.236	-.043	-.093	-.116	-.184
5	143	-.025	-.004	-.058	-.058	-.083	-.083	-.033	-.133	-.094	-.004	-.005
6	130	-.033	-.004	-.004	-.058	-.082	-.082	-.020	-.104	-.098	-.059	-.038
7	104	-.064	-.015	-.034	-.034	-.023	-.019	-.016	-.013	-.013	-.013	-.029
8	135	-.050	-.034	-.068	-.068	-.031	-.030	-.023	-.023	-.023	-.020	-.017
9	148	-.044	-.016	-.035	-.035	-.016	-.019	-.009	-.009	-.009	-.014	-.010
10	144	-.002	-.039	-.009	-.009	-.043	-.012	-.047	-.021	-.024	-.065	-.065
X	N	.774-UPPER CPREAL CPIMAG	.866-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG				
1	254	-2.254	-1.581	-1.024	15.946	-4.983	5.398	-1.191				
2	122	-.122	-.140	-.109	-2.236	-1.707	-.071	-.111				
3	190	-.120	-.194	-.214	-2.537	-1.530	-.271	-.112				
4	128	-.128	-.235	-.231	-2.537	-1.530	-.101	-.054				
5	194	-.124	-.235	-.231	-2.537	-1.530	-.101	-.054				
6	101	-.041	-.060	-.033	-1.29	-.096	-.046	-.174				
7	142	-.042	-.079	-.079	-1.29	-.096	-.046	-.174				
8	200	-.020	-.019	-.033	-1.29	-.096	-.046	-.174				
9	115	-.015	-.019	-.019	-1.29	-.096	-.046	-.174				
10	105	-.015	-.019	-.019	-1.29	-.096	-.046	-.174				

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	2	254	-.278	-.278	-.278	-.278	-.278	-.278
2	122	-.190	-.134	-.134	-.134	-.134	-.134	-.134
3	128	-.042	-.074	-.074	-.074	-.074	-.074	-.074
4	104	-.020	-.014	-.014	-.014	-.014	-.014	-.014
5	104	-.014	-.014	-.014	-.014	-.014	-.014	-.014
6	104	-.014	-.014	-.014	-.014	-.014	-.014	-.014
7	104	-.014	-.014	-.014	-.014	-.014	-.014	-.014
8	104	-.014	-.014	-.014	-.014	-.014	-.014	-.014
9	104	-.014	-.014	-.014	-.014	-.014	-.014	-.014
10	104	-.014	-.014	-.014	-.014	-.014	-.014	-.014

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 72 ALPHA-MCL = 2.0 POP RUN-PT 15.07
RUN 15 ALPHA-BAR = .5 O-COMP = 12172
POINT 13 SIGMA = -135 V-REF = 198.94
COMPUTED FREQUENCY = 15.57, K = .1230
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	18	126	162.19	7.806	163.79	4.464	167.65	2.834	176.02	2.168	197.40	3.038	198.53	3.009	198.41	
2	370	274.40	322	243.72	308	238.79	295	230.16	273	222.08	258	215.85	243	209.51	233	203.35
3	112	216.43	104	209.43	98	203.89	92	198.84	86	193.80	80	188.76	74	183.72	68	178.68
4	145	230.12	137	223.12	130	216.12	122	209.12	114	202.12	106	195.12	98	188.12	90	181.12
5	178	243.81	169	236.81	161	229.81	152	222.81	143	215.81	134	208.81	125	201.81	116	194.81
6	211	257.50	202	250.50	193	243.50	184	236.50	175	229.50	166	222.50	157	215.50	148	208.50
7	244	271.19	235	264.19	226	257.19	217	250.19	208	243.19	199	236.19	190	229.19	181	222.19
8	277	284.88	268	277.88	259	270.88	250	263.88	241	256.88	232	249.88	223	242.88	214	235.88
9	310	298.57	301	291.57	292	284.57	283	277.57	274	270.57	265	263.57	256	256.57	247	249.57
10	343	312.26	334	305.26	325	298.26	316	291.26	307	284.26	298	277.26	289	270.26	280	263.26

X	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	438	202.40	1.758	205.93	1.403	209.46	1.048	212.99	0.693	216.52	0.338	220.05	0.000	223.58	
2	303	293.79	294	286.79	285	279.79	276	272.79	267	265.79	258	258.79	249	251.79	240	244.79
3	105	210.58	96	203.58	87	196.58	78	189.58	69	182.58	60	175.58	51	168.58	42	161.58
4	138	224.27	129	217.27	120	210.27	111	203.27	102	196.27	93	189.27	84	182.27	75	175.27
5	171	237.96	162	230.96	153	223.96	144	216.96	135	209.96	126	202.96	117	195.96	108	188.96
6	204	251.65	195	244.65	186	237.65	177	230.65	168	223.65	159	216.65	150	209.65	141	202.65
7	237	265.34	228	258.34	219	251.34	210	244.34	201	237.34	192	230.34	183	223.34	174	216.34
8	270	279.03	261	272.03	252	265.03	243	258.03	234	251.03	225	244.03	216	237.03	207	230.03
9	303	292.72	294	285.72	285	278.72	276	271.72	267	264.72	258	257.72	249	250.72	240	243.72
10	336	306.41	327	299.41	318	292.41	309	285.41	300	278.41	291	271.41	282	264.41	273	257.41

X	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	266	357.40	1.862	360.93	1.507	364.46	1.152	367.99	0.797	371.52	0.442	375.05	0.087	378.58	
2	266	357.40	257	350.40	248	343.40	239	336.40	230	329.40	221	322.40	212	315.40	203	308.40
3	119	240.05	110	233.05	101	226.05	92	219.05	83	212.05	74	205.05	65	198.05	56	191.05
4	152	253.74	143	246.74	134	239.74	125	232.74	116	225.74	107	218.74	98	211.74	89	204.74
5	185	267.43	176	260.43	167	253.43	158	246.43	149	239.43	140	232.43	131	225.43	122	218.43
6	218	281.12	209	274.12	200	267.12	191	260.12	182	253.12	173	246.12	164	239.12	155	232.12
7	251	294.81	242	287.81	233	280.81	224	273.81	215	266.81	206	259.81	197	252.81	188	245.81
8	284	308.50	275	301.50	266	294.50	257	287.50	248	280.50	239	273.50	230	266.50	221	259.50
9	317	322.19	308	315.19	299	308.19	290	301.19	281	294.19	272	287.19	263	280.19	254	273.19
10	350	335.88	341	328.88	332	321.88	323	314.88	314	307.88	305	300.88	296	293.88	287	286.88

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MODE 1 -- CENTER BLANK DATA, WALL STATIONS

FILE 72 ALPHA-WCL = 2.0 POP RUN PT 15.37
RUN 15 ALPHA-PAR = 0.5 O-COMP = .32172
POINT 3 SIGMA = -1.75 V-PLF = 198.08
COMPUTED FREQUENCY = 15.57, K = .1230

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** ELBOE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI
1	33.199	-15.542	17.911	-7.022	9.758	-2.146	6.607
2	-.266	.338	-.115	.115	-.025	.025	-.025
3	-.155	.074	-.001	.001	-.017	.017	-.017
4	.045	-.037	.015	-.015	.020	-.020	-.020
5	-.273	.218	-.142	.142	-.059	.059	-.059
6	.106	-.098	.053	-.053	.062	-.062	-.062
7	-.041	.164	-.014	.014	-.027	.027	-.027
8	.039	-.045	.026	-.026	.022	-.022	-.022
9	-.107	.038	-.013	.013	-.016	.016	-.016
10	-.025	-.019	-.014	.013	-.007	.007	-.007

X =	.774	.806	.918
N	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI
1	2.959	1.356	1.538
2	-.257	-.122	-.045
3	-.077	.032	-.021
4	.034	-.009	.006
5	-.025	.013	-.007
6	.018	-.013	.008
7	-.015	.006	-.007
8	.004	-.004	.002
9	-.013	.011	-.003
10	-.003	.001	-.001

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
CAP FLECTION	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI
1	2.721	-.920	2.553	-.953	2.200	-.947	2.273	-.946	2.357	-.947
2	-.197	-.249	-.176	-.058	-.326	-.147	-.154	-.416	-.693	-.658
3	-.332	-.247	-.275	-.332	-.326	-.297	-.262	-.297	-.320	-.320
4	-.135	-.296	-.061	-.011	-.176	-.098	-.176	-.098	-.180	-.098
5	-.046	-.125	-.098	-.261	-.124	-.109	-.083	-.109	-.078	-.087
6	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130
7	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130
8	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130
9	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130
10	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130

*** WALL PRESSURES, PER RADIAN ***

*** STABILITY PARAMETER ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
CAP FLECTION	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI	DELCPH DELCPI
1	2.721	-.920	2.553	-.953	2.200	-.947	2.273	-.946	2.357	-.947
2	-.197	-.249	-.176	-.058	-.326	-.147	-.154	-.416	-.693	-.658
3	-.332	-.247	-.275	-.332	-.326	-.297	-.262	-.297	-.320	-.320
4	-.135	-.296	-.061	-.011	-.176	-.098	-.176	-.098	-.180	-.098
5	-.046	-.125	-.098	-.261	-.124	-.109	-.083	-.109	-.078	-.087
6	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130
7	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130
8	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130
9	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130
10	-.012	-.047	-.017	-.026	-.117	-.086	-.039	-.086	-.078	-.130

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 72 ALPHA-MCL = 2.0 PDP RUN.PI 15.07
RUN 13 ALPHA-RAP = 3.5 Q-COMP = 32172
POINT 3 SIGMA = 135. V-PDF = 198.94
COMPUTED FREQUENCY = 15.57, K = .1230
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	34.833	342.30	19.239	338.59	9.991	347.60	6.548	353.63	4.364	7.22	4.947	11.01
2	33.00	231.86	1.273	174.83	.061	208.87	.308	216.01	.100	160.34	.233	27.00
3	.172	154.52	.370	179.79	.080	159.45	.175	264.49	.118	198.29	.333	211.54
4	.349	37.22	.079	256.74	.035	336.55	.123	351.30	.106	132.42	.065	161.87
5	.115	210.66	.153	201.18	.109	236.97	.038	326.98	.069	145.99	.040	256.45
6	.173	283.41	.082	310.74	.021	291.79	.029	50.65	.040	145.38	.016	127.51
7	.102	292.39	.090	278.92	.051	261.63	.027	265.23	.036	243.08	.017	274.20
8	.039	259.35	.066	293.55	.034	318.96	.026	331.26	.021	335.54	.017	307.37
9	.011	216.97	.022	276.48	.013	317.67	.017	289.22	.005	355.84	.010	350.99
10			.019	222.55	.006	105.06	.021	86.42	.020	111.24	.021	111.24

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.233	263.30	2.316	19.19	1.540	153.95	.316	155.13	.194	180.73	1.480	138.39
2	.043	157.19	.045	152.25	.023	189.41	.075	185.33	.004	190.25	.011	190.55
3	.035	144.07	.028	176.76	.033	193.32	.004	50.25	.006	244.46	.005	217.97
4	.028	308.17	.031	12.05	.006	17.34	.015	244.20	.015	244.20	.007	324.87
5	.022	315.54	.008	250.0	.012	211.53	.014	244.26	.006	296.98	.007	270.77
6	.007	47.12	.019	64.1	.009	17.44	.019	323.58	.007	270.77	.007	270.77
7	.012	71.54	.008	11.82	.003	290.37	.019	323.58	.007	270.77	.007	270.77
8	.016	144.15	.016	129.82	.011	66.37	.019	323.58	.007	270.77	.007	270.77
9												
10												

*** STABILITY PARAMETER

WALL NO.	W1	W2	W4	W6	W10	W125	W500	W5000
GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG
1	2.872	341.33	2.724	379.58	7.881	161.79	2.316	166.68
2	.350	304.26	.184	342.81	.849	273.59	.447	291.48
3	.439	220.92	.409	227.71	.385	237.95	.396	228.63
4	.168	215.64	.062	10.11	.283	214.66	.202	209.15
5	.203	256.76	.279	249.51	.126	279.92	.109	268.15
6	.196	275.21	.105	279.15	.125	290.47	.103	291.25
7	.018	298.25	.026	294.55	.041	257.46	.048	259.27
8	.118	358.08	.096	244.01	.142	257.46	.128	259.27
9	.043	106.57	.040	41.08	.042	139.56	.050	96.23
10	.003	324.05	.034	26.23	.077	337.50	.054	341.50

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- UCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 75 ALPHA-MCL = 2.0 PDP RUN-PT 15.09
RUN 15 ALPHA-SAP = 3.5 Q-COMP = 12027
POINT 16 SIGMA = -33.5 V-REF = 198.46
COMPUTED FREQUENCY = 19.25, K = .1523

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X = .012-UPPER
N CPREAL CPIMAG

	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	-17.486	6.000	-7.481	2.334	-3.333	-3.191
2	-1.320	-.114	-.237	-.040	-.062	-.286
3	-.032	-.501	-.050	-.351	-.120	-.154
4	-.150	-.094	-.054	-.143	-.024	-.039
5	-.045	-.196	-.046	-.123	-.011	-.110
6	-.004	-.046	-.019	-.023	-.005	-.027
7	-.069	-.049	-.017	-.048	-.037	-.023
8	-.025	-.086	-.024	-.012	-.008	-.026
9	-.053	-.023				-.006
10						

X = .778-UPPER
N CPREAL CPIMAG

	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.912-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	-2.562	-.905	-1.572	-.748	5.171	3.515
2	-.261	-.112	-.169	-.118	-.219	-.275
3	-.170	-.273	-.103	-.304	-.246	-.194
4	-.006	-.223	-.031	-.251	-.122	-.033
5	-.026	-.034	-.031	-.034	-.045	-.045
6	-.128	-.059	-.123	-.061	-.116	-.125
7	-.037	-.053	-.033	-.058	-.043	-.067
8	-.018	-.022	-.016	-.028	-.014	-.031
9	-.025	-.057	-.005	-.009	-.004	-.028
10				-.058	-.030	-.025

X = .392-LOWER
N CPREAL CPIMAG

	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.778-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1.984	-.064	-.408	-.408	-.137
2	-.222	-.198	-.286	-.348	-.305
3	-.056	-.232	-.183	-.172	-.190
4	-.034	-.022	-.001	-.019	-.008
5	-.039	-.051	-.066	-.057	-.062
6	-.034	-.047	-.112	-.117	-.113
7	-.039	-.047	-.055	-.053	-.050
8	-.022	-.039	-.028	-.013	-.019
9	-.011	-.022	-.010	-.007	-.003
10			-.006		

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 75 ALPHA-MCL = 2.0 PDP RUN.PI 15.09
 RUN 15 ALPHA-BAR = .5 Q-COMP = .32027
 POINT 16 ALPHA SIGMA = -135. V-REF = 198.40
 COMPUTED FREQUENCY = 19.25, K = .1523
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER	012-LOWER	062-UPPER	062-LOWER	142-UPPER	142-LOWER	261-UPPER	261-LOWER	392-UPPER	392-LOWER	510-UPPER	510-LOWER	661-UPPER	661-LOWER	
		CP	PHI	CP	PHI	CP	PHI	CP	PHI	CP	PHI	CP	PHI	CP	PHI	
1	18	449	161.02	0	027	163.10	4	732	167.40	3	072	176.22	2	481	196.20	
2	340	199.53	210	169.16	214	161.60	305	179.52	247	86.80	247	86.80	321	193.01	321	193.01
3	302	161.60	315	181.14	305	179.52	247	86.80	247	86.80	321	193.01	321	193.01	321	193.01
4	177	328.66	164	262.09	160	257.59	189	230.56	189	230.56	259	275.84	259	275.84	259	275.84
5	079	45.70	066	35.66	063	33.48	034	148.15	034	148.15	070	192.37	070	192.37	070	192.37
6	202	101.03	150	124.93	152	134.93	149	22.51	149	22.51	064	35.69	064	35.69	064	35.69
7	087	281.26	039	350.20	053	329.81	052	327.90	052	327.90	038	294.67	038	294.67	038	294.67
8	074	310.38	054	335.36	051	329.81	036	269.43	036	269.43	016	56.69	016	56.69	016	56.69
9	110	231.18	050	250.69	036	269.43	018	65.81	018	65.81	041	295.29	041	295.29	041	295.29
10	058	233.27	027	27.27	010	48.67	062	199.61	062	199.61	049	198.26	049	198.26	049	198.26

X	CP	077-UPPER	077-LOWER	080-UPPER	080-LOWER	090-UPPER	090-LOWER	012-UPPER	012-LOWER	062-UPPER	062-LOWER	142-UPPER	142-LOWER	261-UPPER	261-LOWER
N	CP	PHI	PHI	CP	PHI	CP	PHI	CP	PHI	CP	PHI	CP	PHI	CP	PHI
1	2	717	199.45	2	015	201.69	1	405	199.97	16	457	342.07	10	937	332.85
2	3	248	268.13	3	248	60.98	3	333	272.38	3	331	222.61	3	340	224.74
3	4	079	45.70	4	066	35.66	4	034	148.15	4	034	148.15	4	070	192.37
4	5	202	101.03	5	150	124.93	5	149	22.51	5	064	35.69	5	240	224.74
5	6	087	281.26	6	039	350.20	6	052	327.90	6	038	294.67	6	240	224.74
6	7	110	231.18	7	054	335.36	7	051	329.81	7	036	269.43	7	240	224.74
7	8	058	233.27	8	050	250.69	8	036	269.43	8	016	56.69	8	240	224.74
8	9	028	307.59	9	031	306.52	9	031	306.52	9	041	295.29	9	240	224.74
9	0	009	124.83	0	013	131.81	0	013	131.81	0	049	198.26	0	240	224.74

X	CP	392-LOWER	530-LOWER	661-LOWER	774-LOWER	860-LOWER	910-LOWER
N	CP	PHI	PHI	CP	PHI	CP	PHI
1	1	985	1.579	983	71.55	971	359.25
2	260	149.51	132.04	921	175.21	374	175.21
3	045	25.47	153.30	924	159.08	334	159.08
4	045	25.47	265.39	921	270.28	219	270.28
5	045	25.47	265.39	907	20.31	059	159.08
6	045	25.47	145.36	922	162.18	068	159.08
7	045	25.47	159.34	922	162.18	034	159.08
8	045	25.47	300.12	937	298.89	034	286.77
9	045	25.47	320.56	937	334.57	032	286.77
10	045	25.47	320.56	907	231.57	032	286.77
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MODE 1 --- OCWI PERIODICITY TEST
CENTIF BLADE DATA, WALL STATIONS

FILE 75 ALPHA-WCL = 2.0 PDP RUN-PT 15.09
RUN 15 ALPHA-PAR = 5.0 O-COMP = .32027
POINT 16 SIGMA = -135. V-REF = 198.48
COMPUTED FREQUENCY = 19.25, K = .1523

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	33.104	-11.066	17.413	-7.325	9.769	-2.102	6.580
2	-236	-1.000	-1.082	-1.024	-1.076	-1.024	-1.024
3	.363	-1.000	.032	.066	.161	.106	.112
4	.451	.009	.031	.044	.077	.099	.077
5	.001	.009	.031	.044	.077	.099	.077
6	.123	.158	.059	.118	.009	.009	.009
7	.065	.158	.025	.191	.008	.008	.008
8	.074	.135	.025	.045	.030	.029	.015
9	.163	.113	.057	.071	.041	.032	.029
10	.112	.134	.070	.028	.043	.022	.032

X =	.774	.800	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	2.969	1.433	2.272
2	.325	.022	.074
3	.013	.023	.016
4	.007	.024	.022
5	.016	.000	.026
6	.029	.017	.022
7	.001	.016	.003
8	.002	.016	.003
9	.001	.016	.003
10	.001	.016	.003

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W5	W6	W10	W125
CAP FRACTION	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	2.327	-.070	-.070	-.070	-.070	-.070	-.070
2	.247	.238	.238	.238	.238	.238	.238
3	.171	.171	.171	.171	.171	.171	.171
4	.143	.143	.143	.143	.143	.143	.143
5	.143	.143	.143	.143	.143	.143	.143
6	.143	.143	.143	.143	.143	.143	.143
7	.143	.143	.143	.143	.143	.143	.143
8	.143	.143	.143	.143	.143	.143	.143
9	.143	.143	.143	.143	.143	.143	.143
10	.143	.143	.143	.143	.143	.143	.143

*** STABILITY PARAMETER

* XI = .5689 *

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MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 75 ALPHA-MCL = 2.0 POP RUN-PT 15.009
RUN 15 ALPHA-BAR = .5 O-COMP = .32027
POINT 16 SIGMA = -135. V-REF = 198.48
COMPUTED FREQUENCY = 19.25, K = .1523

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	34.905	341.52	10.891	337.18	9.993	347.86	6.607	354.84	4.431	9.62	4.939	13.24
2	257.201	10.00	1.178	157.47	.040	162.88	.318	204.72	.113	150.19	.208	12.32
3	887.203	1.10	.176	259.48	.192	326.65	.762	296.41	.129	152.05	.061	317.01
4	887.203	1.10	.249	202.85	.009	232.21	.129	306.29	.087	162.66	.078	275.62
5	887.203	1.10	.054	243.53	.009	141.05	.026	11.05	.052	315.57	.042	324.87
6	212.281	1.11	.132	243.53	.008	264.26	.067	271.35	.065	315.57	.040	166.62
7	170.67	59.38	.094	74.38	.056	98.26	.022	16.84	.021	151.20	.019	239.91
8	106.204	35.35	.068	222.04	.041	223.85	.052	24.26	.024	241.98	.019	239.91
9	198.34.83		.113	39.36	.055	42.86	.041	45.27	.024	241.98	.019	239.91
10	120.201.38		.075	201.47	.048	207.59	.039	215.27	.028	223.59	.017	225.38

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.297	25.76	2.383	170.96	1.468	103.53	6.273	355.96	1.07	156.90	1.475	337.31
2	.331	160.76	.074	240.48	.022	289.32	.064	317.75	.047	170.71	.025	301.17
3	.024	287.12	.019	61.05	.019	264.83	.067	243.21	.010	321.56	.019	206.25
4	.028	341.06	.033	323.13	.023	347.64	.047	280.29	.047	280.29	.012	215.27
5	.008	179.52	.017	284.47	.014	303.59	.027	103.82	.021	229.33	.008	82.46
6	.017	272.39	.004	126.41	.013	93.82	.021	229.33	.021	229.33	.005	215.66
7	.016	84.15	.004	274.82	.003	164.22	.032	218.47	.026	218.47	.009	36.59
8	.013	273.67	.014	274.51	.010	336.92					.007	198.26
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*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
GAP FRACTION	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.444	339.50	2.408	342.71	8.101	163.31	2.597	168.26	8.359	31.77		
2	.316	141.53	.301	112.91	.537	214.87	.532	173.97	.014	266.93		
3	.308	236.16	.218	157.74	.388	61.90	.243	254.32	.234	235.42		
4	.099	177.20	.134	43.85	.087	77.86	.072	86.16	.205	332.56		
5	.155	157.50	.179	167.16	.205	134.84	.172	146.15	.246	160.49		
6	.089	39.65	.098	48.44	.069	357.98	.076	35.35	.061	37.40		
7	.088	318.53	.099	308.47	.065	316.11	.065	315.35	.100	293.60		
8	.014	318.05	.049	288.07	.045	259.80	.039	281.44	.024	291.92		
9	.013	171.06	.020	208.39	.030	43.34	.008	90.55	.028	58.56		
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MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 64 A PHA-MCL = 2.0 PDP RUN-PT 14.01
RUN 14 ALPHA-PAR = 0.5 O-COMP = 32580
POINT 11 SIGMA = 0.0 V-CREF = 200.18
COMPUTED FREQUENCY = 9.16, K = .0719

FOURIER COEFFICIENTS, REAL & IMAGINARY
** BLADE PRESSURES, PER RADIAN **

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG							
1	1	-14.385	7.365	-5.892	2.913	-3.007	1.401	-1.628	.511	-502	-552	-849	-971	-713	-1.233
2	2	1.775	-.495	-2.003	-.354	-2.023	-.356	-1.638	.441	-2.444	-.441	-2.133	-.320	-2.284	-.393
3	3	-.335	-.165	-.381	-.057	.412	-.025	-.473	.089	-.529	-.117	-.555	-.017	-.555	.018
4	4	.103	.105	.084	.124	.075	.122	.348	.189	.480	.089	.435	.149	.444	.084
5	5	-.290	-.105	-.256	-.338	.075	-.058	.036	.048	.309	-.089	.296	-.062	.292	-.086
6	6	-.014	.010	.018	-.329	-.327	-.018	.256	-.362	.057	-.002	.132	-.009	.101	-.006
7	7	-.082	.033	.093	-.066	-.086	-.076	.037	-.103	.136	-.094	.139	-.074	.151	-.088
8	8	-.040	.135	.032	-.064	.049	-.076	.031	.079	.059	-.094	.027	-.087	.103	-.093
9	9	-.065	.121	.044	-.077	.033	-.052	.030	.046	.012	.043	.020	.041	.027	.033
10	10														

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG							
1	1	-2.559	1.088	-.004	-6.388	9.389	5.438	4.239	-1.790	-4.761	-4.761	-5.438	-1.790	4.239	-999
2	2	-.545	-.412	-.361	-.090	-.354	-2.123	2.170	-.245	-.354	-.354	-2.123	-.245	2.170	-999
3	3	.423	.175	.002	.138	-.014	-.508	-.051	.016	-.014	-.051	-.508	.016	-.051	-999
4	4	.092	.055	.429	.058	.511	.000	.151	.129	.511	.151	.000	.129	.058	.041
5	5	-.247	-.365	-.095	-.038	.265	.212	-.425	-.401	.265	-.425	.212	-.401	.274	.369
6	6	-.014	.011	.095	-.062	.075	.047	-.018	.004	.075	-.018	.047	.004	.056	.005
7	7	-.082	.167	.160	-.169	.192	.130	.150	.126	.192	.150	.130	.126	.153	-.093
8	8	.035	.051	.059	-.031	.020	.037	-.007	-.011	.020	-.007	.037	-.011	.073	-.000
9	9	.033	.031	.043	-.025	.044	.037	-.007	-.011	.044	-.007	.037	-.011	.073	-.000
10	10														

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	1	-.359	-.088	-.417	-.088	-.388	-.639	-4.761
2	2	-.525	-.017	-.173	-.017	-.138	-.090	-.591
3	3	.082	.173	.058	.022	.124	.138	-.051
4	4	.082	.173	.058	.022	.124	.138	-.051
5	5	.082	.173	.058	.022	.124	.138	-.051
6	6	.082	.173	.058	.022	.124	.138	-.051
7	7	.082	.173	.058	.022	.124	.138	-.051
8	8	.082	.173	.058	.022	.124	.138	-.051
9	9	.082	.173	.058	.022	.124	.138	-.051
10	10							

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	-.090	2.897	1.697	1.764	2.574	1.594
2	2	-.090	2.897	1.697	1.764	2.574	1.594
3	3	-.090	2.897	1.697	1.764	2.574	1.594
4	4	-.090	2.897	1.697	1.764	2.574	1.594
5	5	-.090	2.897	1.697	1.764	2.574	1.594
6	6	-.090	2.897	1.697	1.764	2.574	1.594
7	7	-.090	2.897	1.697	1.764	2.574	1.594
8	8	-.090	2.897	1.697	1.764	2.574	1.594
9	9	-.090	2.897	1.697	1.764	2.574	1.594
10	10	-.090	2.897	1.697	1.764	2.574	1.594

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 64 ALPHA-MCL = 2.0 POP RUN-PT 14.01
RUN 14 ALPHA-BAR = 0.5 Q-COMP = 32580
POINT 1 SIGMA = -90.0 V-REF = 200.16
COMPUTED FREQUENCY = 9.16, K = .0719
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CP-MAG	062-UPPER CP-MAG	148-UPPER CP-MAG	261-UPPER CP-MAG	392-UPPER CP-MAG	530-UPPER CP-MAG	661-UPPER CP-MAG	PHI
1	1	16.169	152.42	3.318	155.02	1.707	167.57	2.746	227.74
2	2	1.821	112.83	2.034	153.69	2.227	111.42	2.483	110.23
3	3	1.800	204.40	2.034	187.28	2.483	169.35	2.483	192.45
4	4	1.49	18.24	1.49	18.24	1.49	18.24	1.49	18.24
5	5	1.49	18.24	1.49	18.24	1.49	18.24	1.49	18.24
6	6	1.49	18.24	1.49	18.24	1.49	18.24	1.49	18.24
7	7	1.49	18.24	1.49	18.24	1.49	18.24	1.49	18.24
8	8	1.49	18.24	1.49	18.24	1.49	18.24	1.49	18.24
9	9	1.49	18.24	1.49	18.24	1.49	18.24	1.49	18.24

X	N	.774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.148-LOWER		.261-LOWER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	1.119	256.43	2.339	284.12	2.789	319.88	15.719	336.02	10.706	333.60	5.725	341.78	4.191	347.71
2	2	1.261	110.36	2.560	119.30	2.292	179.83	1.789	163.18	.506	49.22	.137	178.15	.191	180.98
3	3	1.457	22.26	1.457	22.26	1.457	22.26	.494	13.11	.845	183.49	.508	15.63	.506	15.63
4	4	1.457	22.26	1.457	22.26	1.457	22.26	.546	19.19	.533	16.39	.104	15.63	.461	17.45
5	5	1.457	22.26	1.457	22.26	1.457	22.26	.058	0.58	.127	60.35	.104	304.15	.097	305.97
6	6	1.457	22.26	1.457	22.26	1.457	22.26	.519	302.33	.500	301.95	.047	335.16	.058	335.08
7	7	1.119	256.43	1.112	255.74	.086	307.15	.065	287.59	.077	306.42	.047	335.16	.058	335.08
8	8	1.178	332.66	1.182	336.47	.173	338.04	.187	289.84	.191	306.63	.181	335.88	.179	328.90
9	9	1.116	64.39	1.040	66.55	.124	61.80	.144	27.71	.104	27.71	.104	333.94	.117	359.90
10	10	.045	1.99	.046	1.99	.050	2.37	.058	252.72	.021	342.04	.039	343.94	.038	359.90

X =	392-LOWER CP-MAG	530-LOWER CP-MAG	661-LOWER CP-MAG	774-LOWER CP-MAG	860-LOWER CP-MAG	910-LOWER CP-MAG
1	2.916	352.41	1.773	17.31	2.239	1.594
2	2.021	189.07	1.673	10.79	2.239	1.324
3	1.457	23.10	1.567	198.89	2.239	1.324
4	1.411	23.10	1.400	23.06	2.472	1.974
5	1.404	306.20	1.079	20.05	2.472	2.423
6	1.404	306.20	1.079	306.63	2.472	2.423
7	1.065	10.21	1.089	306.63	2.472	2.423
8	1.168	33.58	1.164	338.24	2.472	2.423
9	1.130	57.26	1.146	55.00	2.472	2.423
10	1.039	14.25	1.070	14.56	2.472	2.423

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 64 ALPHA-MCL = 2.0 PDP RUN-PI 14.01
RUN 14 ALPHA-PAR = .5 Q-COMP = 32580
POINT 1 SIGMA = -90. V-REF = 200.18
COMPUTED FREQUENCY = 9.16, K = .0719

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	29.747	15.481	6.445	5.837	3.392	3.746	2.406
2	-.011	-.005	-.101	-.110	-.119	-.326	-.302
3	-.110	-.006	-.053	-.041	-.048	-.041	-.018
4	-.197	-.027	-.048	-.066	-.093	-.005	-.076
5	-.266	-.043	-.016	-.074	-.011	-.025	-.008
6	-.013	-.145	-.021	-.038	-.052	-.021	-.023
7	-.034	-.057	-.047	-.018	-.007	-.017	-.002
8	-.024	-.026	-.022	-.040	-.005	-.041	-.001
9	-.184	-.133	-.058	-.022	-.035	-.055	-.029
10	-.092	-.176	-.004	-.007	-.027	-.047	-.041

X =	.774	.860	.910	.910	.910	.910	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	2.032	1.585	2.367	1.344	5.219	5.219	1.223
2	-.235	-.033	-.115	-.058	-.131	-.131	-.044
3	-.013	-.016	-.024	-.001	-.008	-.008	-.018
4	-.004	-.012	-.014	-.016	-.005	-.005	-.012
5	-.027	-.055	-.021	-.008	-.004	-.004	-.001
6	-.001	-.023	-.007	-.006	-.002	-.002	-.003
7	-.036	-.012	-.007	-.014	-.019	-.019	-.004
8	-.039	-.042	-.021	-.007	-.037	-.037	-.009
9	-.026	-.027	-.026	-.021	-.017	-.017	-.006
10							-.003

*** STABILITY PARAMETER

* XI = .7189 *

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	2.932	-1.000	-5.785	-984	3.681
2	2.890	-.014	-2.582	2.666	2.696
3	-.667	-.191	-.490	-.520	-.475
4	.117	-.502	.157	.065	.335
5	.341	-.010	.352	.398	-.050
6	.045	-.072	-.138	.019	.194
7	.144	-.081	-.049	.148	-.036
8	.112	-.039	.046	.057	.166
9	.021	-.021	.063	.029	.044
10					.016

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 64 ALPHA-MCL = 2.0 POP RUN-PT 14.01
KUM 14 ALPHA-PAR = .5 Q-COMP = 32580
POINT 1 SIGMA = -90. V-REF = 200.18
COMPUTED FREQUENCY = 9.16, K = .0719
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
		.012		.062		.108		.261		.392		.530		.661			
1	31	.876	334.90	17.279	333.63	9.028	339.30	6.049	345.54	3.396	2.82	3.862	14.11	2.981	36.19		
2	495	271.13	1.644	140.18	.149	312.35	.142	264.62	.464	194.89	.031	.346	19.61	.318	16.25		
3	322	109.89	.132	179.18	.067	142.36	.103	251.71	.093	151.26	.048	.048	242.26	.203	275.05		
4	199	77.86	.132	111.68	.048	111.68	.048	313.91	.051	331.22	.101	.044	325.89	.058	197.31		
5	106	244.45	.048	115.76	.023	313.91	.051	351.21	.053	258.58	.057	.034	293.82	.033	261.72		
6	165	244.90	.087	125.52	.076	285.71	.034	350.47	.039	187.25	.033	.030	293.82	.005	133.23		
7	126	285.40	.087	320.27	.030	313.14	.024	39.28	.019	52.66	.011	.044	339.26	.027	245.63		
8	179	268.79	.088	267.36	.059	304.26	.035	17.99	.036	351.82	.044	.066	57.74	.033	87.29		
9	227	324.12	.072	330.21	.059	340.97	.025	28.76	.050	303.24	.057	.057	324.52	.044	339.05		
10	194	245.05	.087	254.15	.063	274.00	.047	278.97									

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
		.774		.860		.910											
1	2	.569	38.08	2.722	29.58	1.101	25.88	5.263	351.09	1.125	1.09	1.418	329.55				
2	238	188.08	.024	153.17	.255	141.03	.040	187.88	.040	218.66	.032	.051	210.97				
3	.021	129.48	.062	178.17	.045	141.86	.038	218.66	.038	254.72	.012	.020	153.05				
4	.013	288.82	.024	292.53	.031	214.89	.044	214.89	.038	254.72	.012	.012	153.25				
5	.007	211.89	.024	200.07	.064	112.89	.038	262.21	.038	262.21	.004	.004	282.82				
6	.021	93.71	.027	104.73	.023	105.68	.007	18.72	.007	18.72	.007	.007	307.20				
7	.040	26.68	.016	83.08	.042	90.03	.019	348.61	.019	348.61	.038	.008	279.14				
8	.058	47.82	.022	341.16	.022	82.98	.038	13.33	.038	13.33	.008	.008	314.51				
9	.037	313.92	.036	324.69	.013	275.20	.044	292.38	.044	292.38							
10																	

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
		.125		.125		.125		.125		.125		.125		.125		.125	
1	1	3.098	341.17	3.074	343.34	6.479	153.23	1.203	144.84	1.125	1.09	1.418	329.55				
2	2	2.929	9.32	3.103	12.27	2.591	195.42	2.710	110.30	2.710	110.30	2.710	110.30				
3	3	.646	181.27	.665	176.45	.589	195.42	.608	184.47	.608	184.47	.608	184.47				
4	4	.694	111.96	.823	123.39	.698	110.31	.663	119.89	.663	119.89	.663	119.89				
5	5	.137	11.13	.152	12.24	.263	53.42	.067	348.88	.067	348.88	.067	348.88				
6	6	.606	304.19	.524	322.26	.589	306.68	.572	314.10	.572	314.10	.572	314.10				
7	7	.049	348.06	.072	178.86	.079	107.57	.050	67.91	.050	67.91	.050	67.91				
8	8	.243	306.36	.164	299.60	.161	328.99	.184	323.55	.184	323.55	.184	323.55				
9	9	.110	110.36	.041	343.70	.151	328.49	.083	46.37	.083	46.37	.083	46.37				
10	10	.048	62.42	.096	77.33	.074	32.52	.054	57.25	.054	57.25	.054	57.25				

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCW PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 66 ALPHA-MCL = 2.0 PDP RUN-PT 14.03
RUN 14 ALPHA-RAR = .5 O-COMP = .32280
POINT 3 SIGMA = -90. V-REF = 199.24
COMPUTED FREQUENCY = 15.54, K = .1225
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	15	696	7.329	2.568	4.056	-3.244	-3.760	-3.644
2	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457
3	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457
4	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457
5	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457
6	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457
7	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457
8	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457
9	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457
10	15	679	1.171	4.90	1.11	-2.68	-1.73	-1.457

X	N	.77M-UPPER CPREAL CPIMAG	.86C-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	15	693	1.691	2.251	11.057	5.922	2.616	1.354
2	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131
3	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131
4	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131
5	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131
6	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131
7	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131
8	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131
9	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131
10	15	670	1.396	2.072	7.544	-1.374	-1.148	-1.131

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.77M-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	15	693	1.691	2.251	11.057	5.922	2.616
2	15	670	1.396	2.072	7.544	-1.374	-1.148
3	15	670	1.396	2.072	7.544	-1.374	-1.148
4	15	670	1.396	2.072	7.544	-1.374	-1.148
5	15	670	1.396	2.072	7.544	-1.374	-1.148
6	15	670	1.396	2.072	7.544	-1.374	-1.148
7	15	670	1.396	2.072	7.544	-1.374	-1.148
8	15	670	1.396	2.072	7.544	-1.374	-1.148
9	15	670	1.396	2.072	7.544	-1.374	-1.148
10	15	670	1.396	2.072	7.544	-1.374	-1.148

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 66 ALPHA-MCL = 2.0 POP RUN-PT 14.03
RUN 14 ALPHA-BAR = .5 O-COMP = .3280
POINT 13 SIGMA = -90. V-REF = 135.24
COMPUTED FREQUENCY = 15.54, K = .1225
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

N	X = .012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	17	314	154.96	8.320	162.02	5.347	170.68	4.057	181.46	3.525	203.03	4.173	205.73	4.164
2	1	701	207.47	4.998	240.59	4.428	238.97	3.822	290.01	4.771	304.67	4.489	249.24	4.389
3	1	410	207.47	3.06	214.75	2.51	203.40	1.87	177.44	3.56	210.85	2.86	212.77	2.86
4	1	108	325.36	1.15	176.38	0.94	191.00	1.59	177.44	1.61	210.85	1.40	190.89	1.40
5	1	344	325.36	0.38	325.25	0.379	329.07	0.390	331.75	0.473	343.49	0.439	344.20	0.439
6	1	225	110.49	0.18	36.00	0.15	110.10	0.23	98.15	0.43	80.76	0.28	137.49	0.28
7	1	155	149.41	0.13	149.52	0.094	158.92	0.092	165.68	0.105	175.10	0.098	173.11	0.098
8	1	121	143.88	0.071	156.18	0.069	149.88	0.068	150.70	0.070	166.83	0.074	150.77	0.074
9	1	050	136.65	0.042	151.12	0.042	151.12	0.048	150.70	0.055	166.83	0.052	150.77	0.052
10	1	081	160.49	0.051	136.29	0.050	130.14	0.051	122.81	0.055	114.64	0.052	128.03	0.052

N	X = .774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.188-LOWER		.261-LOWER	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	3	690	211.33	3.139	212.59	2.619	210.42	13.385	325.09	6.305	315.49	3.577	317.02	2.114
2	1	249	207.07	2.283	207.85	2.31	201.90	0.98	236.44	1.478	159.05	3.40	216.50	3.40
3	1	159	197.33	1.54	198.96	1.42	195.90	0.98	183.25	1.314	195.86	1.71	193.54	1.71
4	1	038	152.42	0.43	354.33	0.410	352.18	0.260	183.25	0.456	183.10	0.435	193.54	0.435
5	1	074	175.38	0.26	170.53	0.211	168.05	0.177	179.96	0.056	177.39	0.074	165.92	0.074
6	1	064	142.76	0.069	170.53	0.071	170.05	0.102	237.62	0.088	213.02	0.074	197.52	0.088
7	1	064	142.76	0.062	144.39	0.056	158.65	0.028	207.23	0.035	180.72	0.050	181.28	0.050
8	1	058	128.65	0.069	135.33	0.070	139.67	0.059	1.23	0.067	7.04	0.065	109.07	0.065
9	1	058	128.65	0.060	124.05	0.061	128.66	0.077	50.80	0.052	84.99	0.054	109.07	0.054
10	1	058	128.65	0.060	124.05	0.061	128.66	0.077	50.80	0.052	84.99	0.054	109.07	0.054

N	X = .392-LOWER		.530-LOWER		.661-LOWER		.774-LOWER		.860-LOWER		.910-LOWER			
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI		
1	1	985	289.56	757	253.58	915	184.15	1.125	192.09	989	231.92	1.646	216.04	
2	1	337	255.87	404	260.45	533	302.63	481	228.09	387	248.07	2.945	210.01	
3	1	191	217.55	277	217.21	305	203.98	177	211.10	183	211.04	2.14	210.01	
4	1	135	204.19	145	200.96	134	220.46	140	208.71	127	206.39	1.22	210.01	
5	1	406	164.41	488	149.74	404	354.02	439	355.68	397	354.45	1.37	210.01	
6	1	022	187.58	028	190.47	023	173.36	051	160.28	336	152.39	0.76	167.08	
7	1	040	199.36	046	175.67	048	173.36	081	188.84	073	187.02	0.85	178.89	
8	1	062	123.47	070	19.79	041	181.68	047	174.15	073	179.52	0.33	165.05	
9	1	062	123.47	070	19.79	041	181.68	047	174.15	069	179.52	0.33	165.05	
10	1	062	123.47	070	19.79	041	181.68	047	174.15	069	179.52	0.33	165.05	

WALL NO. GAP FRACTION	W1		W2		W4		W6		W10		* XI = .7506 *
	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	
1	-.527	-1.997	-.344	-2.025	-5.629	2.211	-3.852	-.160	1.047	6.040	
2	-.063	-.502	.011	-.297	-.103	-.811	-.001	-.508	.197	.054	
3	-.254	-.158	-.153	-.304	-.109	-.038	.436	-.030	.068	.410	
4	-.199	-.623	-.262	.016	-.058	-.072	.174	.023	-.184	.121	
5	.439	-.306	.475	-.287	.497	-.237	.451	.184	.416	.116	
6	-.024	.019	.393	.054	-.056	.108	.145	-.041	-.063	-.053	
7	.135	.017	-.079	.049	.154	.023	.118	.024	-.201	-.057	
8	-.353	.312	.063	.024	-.097	.082	.054	.017	.072	-.001	
9	.057	.043	.071	.059	.069	-.059	.210	-.028	-.003	.054	
10	-.066	.066	-.013	.021	-.058	.072	.056	.065	-.003	.054	

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 66 ALPHA-MCL = 2.0 POP RUN-PT 14.03
RUN 14 ALPHA-RAR = .5 Q-COMP = 32280
POINT 3 SIGMA = -90. V-REF = 199.24
COMPUTED FREQUENCY = 15.54, K = .1225

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	.062	.012	.062	.012	.062	.012	.062	.012	.062	.012	.062	.012
1	30.600	330.92	16.181	328.77	8.557	337.29	5.620	349.31	3.602	170.16	3.778	17.02
2	.984	158.17	.102	145.27	.264	160.34	.262	177.34	.165	32.14	.122	328.48
3	.331	19.15	.051	151.58	.093	358.81	.063	303.86	.046	86.82	.025	326.34
4	.199	160.77	.012	151.60	.082	196.44	.079	282.00	.071	158.92	.066	29.57
5	.088	122.01	.012	191.03	.028	122.74	.141	57.73	.047	233.41	.022	261.53
6	.044	197.01	.081	191.03	.039	191.70	.037	211.92	.040	332.36	.016	271.12
7	.181	295.46	.108	282.66	.039	286.45	.064	282.62	.023	341.71	.019	294.98
8	.111	310.85	.048	286.20	.044	328.24	.050	275.23	.023	281.79	.039	299.98
9	.034	302.24	.056	309.50	.044	328.24	.033	355.09	.023	242.77	.017	153.15
10	.129	14.98	.045	22.14	.020	41.28	.018	183.12	.014	242.77	.007	153.15

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	.774	.860	.774	.860	.774	.860	.774	.860	.774	.860	.774	.860
1	2.597	19.16	2.229	24.15	.985	20.99	5.920	150.12	.020	152.04	.007	126.08
2	.295	177.47	.062	162.19	.044	332.71	.053	162.63	.053	162.63	.011	162.76
3	.030	311.94	.032	347.83	.066	316.46	.020	267.58	.045	59.57	.005	18.84
4	.037	60.68	.046	173.35	.039	89.94	.025	216.43	.037	287.43	.010	193.41
5	.024	205.29	.011	162.75	.005	353.48	.030	287.43	.022	307.15	.004	211.12
6	.019	325.63	.021	325.80	.024	329.78	.022	318.85	.007	312.35	.004	47.68
7	.013	325.09	.024	324.16	.004	279.35	.007	312.35	.007	312.35	.004	47.68
8	.011	23.92	.003	133.62	.022	279.58	.007	312.35	.007	312.35	.004	47.68
9	.014	254.06	.027	165.07	.022	279.58	.007	312.35	.007	312.35	.004	47.68
10												

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
GAP FRACTION	N	.000	N	.000	N	.000	N	.000	N	.000	N	.000
1	2.065	255.23	2.054	260.37	8.907	165.63	3.655	182.38	6.130	40.16	4.130	15.21
2	.506	262.82	.297	272.12	.018	262.77	.508	269.83	.204	15.21	.415	179.46
3	.274	215.28	.340	273.32	.092	159.17	.417	189.51	.230	279.46	.230	279.46
4	.201	186.54	.262	176.60	.092	159.17	.417	189.51	.230	279.46	.230	279.46
5	.528	124.15	.555	128.88	.551	171.51	.199	191.79	.082	220.40	.082	220.40
6	.031	141.25	.107	303.51	.122	177.51	.121	168.75	.209	195.83	.209	195.83
7	.106	170.68	.091	148.29	.156	171.37	.056	162.75	.072	120.49	.072	120.49
8	.054	167.33	.068	159.09	.127	140.06	.212	152.38	.054	93.30	.054	93.30
9	.071	16.94	.092	139.78	.091	319.30	.086	131.03				
10	.066	95.24	.025	123.06	.093	128.63						

*** STABILITY PARAMETER

*** XI = 7506 ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 68 ALPHA-PCL = 2.0 PDP RUN-PT 14.05
RUN 14 ALPHA-PAR = 0.5 O-COMP = 32162
POINT 15 SIGMA = -90.0 V-REF = 198.87
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	14	554	7.511	-6.579	2.214	-3.853	3.08	-2.588
2	14	488	7.488	1.21	2.268	2.59	1.68	3.51
3	14	120	7.436	1.87	2.30	2.05	1.08	2.48
4	14	546	7.489	3.76	2.271	3.52	3.06	2.55
5	14	102	7.500	-0.071	2.274	0.16	0.025	0.19
6	14	061	7.502	-0.071	2.274	0.16	0.025	0.19
7	14	047	7.547	0.51	2.213	0.27	0.012	0.32
8	14	016	7.538	0.23	2.217	0.27	0.012	0.32
9	14	000	7.520	0.15	2.209	0.25	0.010	0.30
10	14	014	7.504	0.15	2.209	0.25	0.010	0.30

X	N	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	14	413	-2.690	-1.176	12.524	-1.195	4.159	2.923
2	14	176	-2.691	1.111	12.524	-1.195	4.159	2.923
3	14	222	-2.691	1.111	12.524	-1.195	4.159	2.923
4	14	511	-2.691	1.111	12.524	-1.195	4.159	2.923
5	14	010	-2.691	1.111	12.524	-1.195	4.159	2.923
6	14	079	-2.691	1.111	12.524	-1.195	4.159	2.923
7	14	052	-2.691	1.111	12.524	-1.195	4.159	2.923
8	14	008	-2.691	1.111	12.524	-1.195	4.159	2.923
9	14	005	-2.691	1.111	12.524	-1.195	4.159	2.923
10	14	041	-2.691	1.111	12.524	-1.195	4.159	2.923

X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG
1	14	765	-1.570	1.526	-1.449	1.526	-1.449
2	14	072	-1.570	1.526	-1.449	1.526	-1.449
3	14	445	-1.570	1.526	-1.449	1.526	-1.449
4	14	019	-1.570	1.526	-1.449	1.526	-1.449
5	14	054	-1.570	1.526	-1.449	1.526	-1.449
6	14	054	-1.570	1.526	-1.449	1.526	-1.449
7	14	019	-1.570	1.526	-1.449	1.526	-1.449
8	14	019	-1.570	1.526	-1.449	1.526	-1.449
9	14	019	-1.570	1.526	-1.449	1.526	-1.449
10	14	019	-1.570	1.526	-1.449	1.526	-1.449

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCHI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 68 ALPHA-MCL = 2.0 POP RUN-PT 14.05
RUN 14 ALPHA-BAR = .5 Q-COMP = 321.62
POINT 5 SIGMA = -90. V-REF = 198.87
COMPUTED FREQUENCY = 19.25, K = .1520
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	16	.378	152.70	.041	161.40	.041	161.40	.041	161.40	.041	161.40	.041	161.40
2	3	.655	111.76	.189	350.89	.189	350.89	.189	350.89	.189	350.89	.189	350.89
3	5	.553	350.76	.563	323.41	.563	323.41	.563	323.41	.563	323.41	.563	323.41
4	7	.102	180.03	.073	223.52	.073	223.52	.073	223.52	.073	223.52	.073	223.52
5	9	.066	175.42	.071	175.52	.071	175.52	.071	175.52	.071	175.52	.071	175.52
6	10	.041	247.78	.051	345.71	.051	345.71	.051	345.71	.051	345.71	.051	345.71
7	8	.020	88.79	.028	223.68	.028	223.68	.028	223.68	.028	223.68	.028	223.68
8	9	.014	196.17	.037	196.02	.037	196.02	.037	196.02	.037	196.02	.037	196.02
9	10												
10													

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.078	332.39	.219	249.78	.219	249.78	.219	249.78	.219	249.78	.219	249.78
2	2	.198	332.39	.235	329.55	.235	329.55	.235	329.55	.235	329.55	.235	329.55
3	3	.010	328.33	.014	329.71	.014	329.71	.014	329.71	.014	329.71	.014	329.71
4	4	.004	199.89	.077	204.27	.077	204.27	.077	204.27	.077	204.27	.077	204.27
5	5	.052	73.32	.059	91.51	.059	91.51	.059	91.51	.059	91.51	.059	91.51
6	6	.025	249.78	.034	229.45	.034	229.45	.034	229.45	.034	229.45	.034	229.45
7	7	.045	205.73	.046	220.33	.046	220.33	.046	220.33	.046	220.33	.046	220.33
8	8												
9	9												
10	10												

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.362	318.36	.180	316.49	.180	316.49	.180	316.49	.180	316.49	.180	316.49
2	2	.116	308.32	.256	323.16	.256	323.16	.256	323.16	.256	323.16	.256	323.16
3	3	.392	318.36	.757	327.47	.757	327.47	.757	327.47	.757	327.47	.757	327.47
4	4	.001	183.82	.067	200.26	.067	200.26	.067	200.26	.067	200.26	.067	200.26
5	5	.034	114.16	.072	235.68	.072	235.68	.072	235.68	.072	235.68	.072	235.68
6	6	.012	269.72	.037	120.17	.037	120.17	.037	120.17	.037	120.17	.037	120.17
7	7	.042	207.79	.051	208.80	.051	208.80	.051	208.80	.051	208.80	.051	208.80
8	8												
9	9												
10	10												

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 --- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 63 ALPHA-POL = 2.0 FOP RUN.PT 14.05
RUN 15 ALPHA-RAR = .5 O-COMP = .32162
POINT 5 SIGMA = -90. V-REF = .198.R7
COMPUTED FREQUENCY = 19.25, K = .1520

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	27.078	-16.341	13.774	-9.297	8.012	-3.582	5.511
2	-1.134	.450	-1.325	1.241	-3.119	.084	-.341
3	.364	-.359	.152	-.184	.128	-.098	.045
4	-.210	.064	-.151	.055	-.050	.080	-.032
5	-.036	-.048	-.040	.032	-.008	.028	.015
6	.020	-.059	.038	.077	.020	.028	.008
7	.018	.116	.032	.061	.045	.044	-.058
8	-.011	-.065	.015	.035	.032	.033	.008
9	-.041	-.044	-.018	-.025	.006	-.009	.008
10							

X	.774	.800	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	1.944	1.770	1.715
2	-.311	.065	-.161
3	.121	-.016	.024
4	-.036	.045	.014
5	.007	.016	.008
6	.009	.027	.009
7	-.024	.008	.006
8	-.004	.008	.006
9	-.001	.008	.006
10			

*** STABILITY PARAMETER

* XI = .8247 *

WALL NO.	W1	W2	W4	W6	W10	W125
GAP FRACTION	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	1.454	-2.691	1.680	-3.024	-6.717	1.497
2	.147	-.156	.219	-.000	.301	-.476
3	.361	-.084	.318	-.015	.395	-.056
4	.314	-.591	.315	-.544	.521	-.442
5	.019	.032	.021	-.033	.001	.006
6	-.105	-.027	.105	-.018	.122	.007
7	.022	.017	.014	.007	.010	-.016
8	.015	.049	.014	.028	.042	.018
9	.017	.021	.034	.005	.005	-.033
10	-.058	-.028	.054	-.039	-.071	-.027

MODE 1 -- OCWI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 68 ALPHA-MCL = 2.0 PDP RUN PT 14.05
RUN 14 ALPHA-BAR = 5.0 O-COMP = 12162
POINT 5 SIGMA = -90.0 V-REF = 198.87
COMPUTED FREQUENCY = 19.25, K = .1520
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	31.627	328.89	16.618	325.98	8.776	335.91	5.738	343.81	3.530	18.19
2	1.220	158.37	1.816	150.31	.130	137.23	.341	178.90	.438	167.19
3	.706	213.42	.514	222.63	.191	268.84	.046	317.39	.109	38.78
4	.220	213.96	.161	218.14	.194	253.67	.079	268.18	.019	134.84
5	.060	213.07	.051	218.28	.029	253.67	.049	268.18	.032	354.77
6	.063	289.08	.039	117.94	.035	54.79	.056	82.10	.016	296.84
7	.118	81.08	.069	117.94	.063	135.84	.057	151.10	.045	148.13
8	.066	260.89	.038	293.16	.046	313.69	.050	334.16	.028	322.95
9	.060	227.03	.031	234.82	.011	308.86	.011	313.23	.021	34.38
10										

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.629	42.32	1.951	28.43	.930	33.12	.069	31.49	.074	157.04
2	.117	166.26	.161	178.38	.016	267.23	.065	289.82	.040	299.89
3	.122	171.75	.025	149.38	.015	267.23	.010	289.82	.016	66.72
4	.135	171.51	.024	155.73	.015	289.82	.025	290.77	.021	300.94
5	.018	197.34	.014	168.41	.015	289.82	.016	290.77	.019	83.21
6	.028	197.55	.024	170.34	.016	290.77	.015	105.51	.019	142.87
7	.026	199.03	.022	122.71	.015	105.51	.011	200.87	.003	304.96
8	.020	101.49	.012	255.19	.011	200.87				
9	.001	156.49								
10										

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	3.237	296.70	3.459	299.06	6.882	162.44	2.184	204.96	6.190	6.190	6.190	6.190	6.190	6.190	6.190	6.190
2	.370	313.24	.318	357.31	.563	302.28	.319	311.75	.666	.666	.666	.666	.666	.666	.666	.666
3	.669	297.96	.629	300.06	.683	319.64	.592	321.45	.718	.718	.718	.718	.718	.718	.718	.718
4	.107	348.54	.081	192.91	.006	78.25	.041	148.54	.080	.080	.080	.080	.080	.080	.080	.080
5	.084	348.54	.105	4.00	.122	177.67	.085	173.30	.104	.104	.104	.104	.104	.104	.104	.104
6	.052	231.47	.032	117.96	.045	339.62	.067	264.41	.063	.063	.063	.063	.063	.063	.063	.063
7	.027	231.47	.057	199.17	.053	183.88	.034	260.95	.075	.075	.075	.075	.075	.075	.075	.075
8									.087	.087	.087	.087	.087	.087	.087	.087
9																
10																

*** STABILITY PARAMETER

W1	1.125	PHI	1.125	PHI
W2	1.125	PHI	1.125	PHI
W3	1.125	PHI	1.125	PHI
W4	1.125	PHI	1.125	PHI
W5	1.125	PHI	1.125	PHI
W6	1.125	PHI	1.125	PHI
W7	1.125	PHI	1.125	PHI
W8	1.125	PHI	1.125	PHI
W9	1.125	PHI	1.125	PHI
W10	1.125	PHI	1.125	PHI

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCMI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 51 ALPHA-MCL = 2.0 PDP RUN-PT 11.07
RUN 11 ALPHA-PAR = .5 Q-COMP = .32769
POINT 11 SIGMA = -.45 V-REF = 200.8C
COMPUTED FREQUENCY = 9.14, K = .0715

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	1	-9.950	7.041	-2.677	-1.592	-6.660	-7.788	-5.558
2	2	-7.760	-1.174	-7.769	-9.336	-1.944	-7.777	-6.229
3	3	-7.977	-2.233	-9.266	-8.781	-1.095	-1.049	-1.028
4	4	-5.583	-0.111	-8.654	-8.911	-9.733	-1.059	-1.068
5	5	-1.550	-3.827	-8.466	-1.111	-9.733	-1.059	-1.068
6	6	-1.550	-3.827	-8.466	-1.111	-9.733	-1.059	-1.068
7	7	-1.550	-3.827	-8.466	-1.111	-9.733	-1.059	-1.068
8	8	-1.550	-3.827	-8.466	-1.111	-9.733	-1.059	-1.068
9	9	-1.550	-3.827	-8.466	-1.111	-9.733	-1.059	-1.068
10	10	-1.550	-3.827	-8.466	-1.111	-9.733	-1.059	-1.068

X	N	.774-UPPER CPREAL CPIMAG	.866-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	1	-1.845	-4.023	-3.244	8.675	5.940	2.740	2.985
2	2	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449
3	3	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449
4	4	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449
5	5	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449
6	6	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449
7	7	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449
8	8	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449
9	9	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449
10	10	-1.011	-3.455	-1.860	-3.099	-1.209	-6.948	-9.449

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.866-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	1.442	-3.114	1.495	1.059	1.667	1.092
2	2	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451
3	3	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451
4	4	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451
5	5	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451
6	6	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451
7	7	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451
8	8	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451
9	9	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451
10	10	-8.933	-0.922	-1.016	-9.977	-8.806	-9.451

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 51 ALPHA-MCL = 2.0 POP RUN-PT 11.07
RUN 11 ALPHA-BAR = .5 Q-COMP = 12769
POINT 1 SIGMA = -45. V-REF = 200.80
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	12.189	144.72	9.903	161.82	2.714	189.39	2.274	225.59	3.496	258.45	3.724	257.88	4.336	262.61	4.631	262.61	4.336	262.61	4.631	262.61
2	1.779	147.04	.799	154.51	.770	156.87	.936	156.66	1.129	165.58	1.008	160.92	1.063	177.01	1.029	177.01	1.063	177.01	1.029	177.01
3	1.003	167.16	.803	159.50	.890	158.55	.964	156.66	1.023	165.89	1.008	160.92	1.063	177.01	1.029	177.01	1.063	177.01	1.029	177.01
4	.510	191.45	.809	190.98	.343	177.68	.341	171.44	.823	180.32	.790	124.28	.817	104.18	.817	104.18	.817	104.18	.817	104.18
5	.718	121.97	.761	117.23	.744	118.74	.766	123.92	.565	137.94	.550	137.71	.609	128.95	.609	128.95	.609	128.95	.609	128.95
6	.539	37.80	.537	34.25	.516	35.26	.525	33.74	.524	30.59	.527	44.46	.527	44.46	.527	44.46	.527	44.46	.527	44.46
7	.049	96.70	.068	41.59	.097	38.89	.113	27.89	.124	158.20	.167	158.20	.204	156.52	.204	156.52	.204	156.52	.204	156.52
8	.127	161.03	.154	153.41	.159	151.19	.171	155.93	.171	155.93	.171	155.93	.171	155.93	.171	155.93	.171	155.93	.171	155.93
9	.021	150.99	.004	159.12	.009	174.32	.025	90.38	.025	90.38	.025	90.38	.025	90.38	.025	90.38	.025	90.38	.025	90.38
10																				

X	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	4.026	267.95	3.858	272.42	3.559	275.22	3.449	310.17	2.971	302.83	5.478	300.04	4.524	297.33	4.524	297.33	4.524	297.33	4.524	297.33
2	1.068	161.16	1.019	161.22	1.087	159.77	1.144	147.96	1.352	158.02	1.009	155.46	1.025	157.75	1.025	157.75	1.025	157.75	1.025	157.75
3	1.009	179.21	.361	128.00	.343	127.69	.343	123.36	.817	116.47	.797	119.25	.763	124.19	.763	124.19	.763	124.19	.763	124.19
4	.337	279.70	.541	140.13	.511	136.79	.504	123.89	.511	123.74	.507	129.25	.504	124.19	.504	124.19	.504	124.19	.504	124.19
5	.132	38.86	.163	48.18	.157	50.40	.161	20.02	.120	22.54	.149	34.77	.159	44.55	.159	44.55	.159	44.55	.159	44.55
6	.152	159.12	.201	157.45	.189	155.64	.224	140.66	.240	155.49	.234	146.74	.234	146.74	.234	146.74	.234	146.74	.234	146.74
7	.029	108.08	.029	104.99	.036	175.36	.075	134.99	.075	134.99	.075	134.99	.075	134.99	.075	134.99	.075	134.99	.075	134.99
8																				
9																				
10																				

X	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	3.432	294.85	3.704	293.80	2.575	298.89	2.885	291.53	3.137	302.11	2.952	291.70	2.952	291.70	2.952	291.70	2.952	291.70	2.952	291.70
2	.710	157.00	1.075	158.77	1.016	160.94	1.069	158.87	.810	156.91	1.801	157.15	1.801	157.15	1.801	157.15	1.801	157.15	1.801	157.15
3	.823	169.91	1.074	158.95	.904	160.63	1.031	159.47	.940	161.94	.957	157.66	.957	157.66	.957	157.66	.957	157.66	.957	157.66
4	.324	269.11	.407	270.78	.383	270.23	.351	270.99	.334	271.03	.332	268.76	.332	268.76	.332	268.76	.332	268.76	.332	268.76
5	.294	120.02	.592	122.75	.490	120.92	.563	119.79	.495	119.24	.499	117.05	.499	117.05	.499	117.05	.499	117.05	.499	117.05
6	.146	43.99	.183	44.88	.154	51.15	.197	45.69	.151	55.27	.158	48.80	.158	48.80	.158	48.80	.158	48.80	.158	48.80
7	.189	150.70	.235	152.72	.194	157.44	.197	156.32	.194	159.37	.146	162.19	.146	162.19	.146	162.19	.146	162.19	.146	162.19
8	.007	117.02	.014	173.46	.011	335.46	.020	129.12	.016	80.59	.021	162.19	.021	162.19	.021	162.19	.021	162.19	.021	162.19
9																				
10																				

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 51 ALPHA-MCL = 2.0 POP RUN-PT 11.07
RUN 11 ALPHA-PAR = 5.0 Q-COMP = 32769
POINT 11 SIGMA = -4.5 V-REF = 200.80
COMPUTED FREQUENCY = 9.14, K = .0715

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE = 9.14, K = .0715
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	25.591	317.08	13.467	316.07	6.914	321.59	390	326.87	2.105	313.33	2.300	313.33	2.300	313.33
2	.584	176.83	.187	176.95	.056	176.18	.056	176.18	.227	157.10	.066	157.10	.066	157.10
3	.954	203.44	.100	203.89	.046	203.44	.046	203.44	.008	146.55	.076	146.55	.076	146.55
4	.180	283.01	.057	283.20	.034	283.99	.034	283.99	.111	327.79	.051	327.79	.051	327.79
5	.131	285.01	.082	281.57	.048	291.59	.048	291.59	.038	251.29	.055	251.29	.055	251.29
6	.114	117.84	.072	120.33	.052	27.10	.052	27.10	.033	92.29	.044	92.29	.044	92.29
7	.093	142.71	.041	130.48	.031	153.06	.031	153.06	.023	313.32	.015	313.32	.015	313.32

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	1.800	46.08	1.923	38.50	1.110	46.23	1.110	46.23	3.500	337.75	1.183	337.75	1.183	337.75
2	.127	160.57	.058	171.02	.072	142.49	.072	142.49	.177	188.65	.015	188.65	.015	188.65
3	.035	236.16	.153	154.90	.040	156.79	.040	156.79	.063	252.12	.037	252.12	.037	252.12
4	.055	169.90	.045	149.13	.042	133.99	.042	133.99	.062	178.41	.007	178.41	.007	178.41
5	.066	141.39	.039	121.75	.009	198.20	.009	198.20	.011	197.41	.006	197.41	.006	197.41
6	.046	154.13	.052	248.74	.012	206.23	.012	206.23	.029	246.61	.006	246.61	.006	246.61
7	.013	198.05	.017	188.23	.004	330.01	.004	330.01	.037	54.23	.004	54.23	.004	54.23
8	.013	198.05	.007	273.91	.016	257.01	.016	257.01	.019	120.65	.004	120.65	.004	120.65
9	.013	198.05	.016	273.91	.016	257.01	.016	257.01	.019	120.65	.004	120.65	.004	120.65
10	.013	198.05	.016	273.91	.016	257.01	.016	257.01	.019	120.65	.004	120.65	.004	120.65

*** WALL PRESSURES, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	1.196	279.95	1.469	283.80	1.934	175.74	1.934	175.74	2.507	244.31	3.608	244.31	3.608	244.31
2	.664	152.42	1.279	154.92	1.063	150.09	1.063	150.09	.986	160.26	.807	160.26	.807	160.26
3	1.375	192.42	1.425	184.07	1.375	165.39	1.375	165.39	1.292	194.15	1.033	194.15	1.033	194.15
4	.496	266.58	1.509	262.79	1.032	271.17	1.032	271.17	1.476	277.61	.434	277.61	.434	277.61
5	1.119	119.41	1.605	111.97	1.073	121.10	1.073	121.10	.995	122.58	.814	122.58	.814	122.58
6	.696	29.49	1.332	29.49	.073	50.03	.073	50.03	.614	39.23	.540	39.23	.540	39.23
7	.150	27.69	.267	15.17	.021	171.34	.021	171.34	.140	149.05	.124	149.05	.124	149.05
8	.268	143.85	.049	122.27	.043	124.21	.043	124.21	.193	149.05	.164	149.05	.164	149.05
9	.057	126.18	.049	122.27	.043	124.21	.043	124.21	.193	149.05	.164	149.05	.164	149.05
10	.057	126.18	.049	122.27	.043	124.21	.043	124.21	.193	149.05	.164	149.05	.164	149.05

*** STABILITY PARAMETER ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	1.196	279.95	1.469	283.80	1.934	175.74	1.934	175.74	2.507	244.31	3.608	244.31	3.608	244.31
2	.664	152.42	1.279	154.92	1.063	150.09	1.063	150.09	.986	160.26	.807	160.26	.807	160.26
3	1.375	192.42	1.425	184.07	1.375	165.39	1.375	165.39	1.292	194.15	1.033	194.15	1.033	194.15
4	.496	266.58	1.509	262.79	1.032	271.17	1.032	271.17	1.476	277.61	.434	277.61	.434	277.61
5	1.119	119.41	1.605	111.97	1.073	121.10	1.073	121.10	.995	122.58	.814	122.58	.814	122.58
6	.696	29.49	1.332	29.49	.073	50.03	.073	50.03	.614	39.23	.540	39.23	.540	39.23
7	.150	27.69	.267	15.17	.021	171.34	.021	171.34	.140	149.05	.124	149.05	.124	149.05
8	.268	143.85	.049	122.27	.043	124.21	.043	124.21	.193	149.05	.164	149.05	.164	149.05
9	.057	126.18	.049	122.27	.043	124.21	.043	124.21	.193	149.05	.164	149.05	.164	149.05
10	.057	126.18	.049	122.27	.043	124.21	.043	124.21	.193	149.05	.164	149.05	.164	149.05

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 53 ALPHA-MCL = 2.0 PDP RUN-PT 11.09
RUN 11 ALPHA-RAR = .5 0-COMP = .32646
POINT 13 SIGMA = -.45 V-REF = 200.42
COMPUTED FREQUENCY = 15.62, K = .1225

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG							
1	1	-9.074	7.612	-4.154	2.096	-2.351	.115	-1.484	-1.048	-.639	-2.742	-.819	-3.078	-.622	-3.213
2	2	-.462	-.936	-.430	-.946	-.422	-.899	-.465	-.874	-.553	-.959	-.303	-.840	-.289	-.896
3	3	-.456	-.286	-.255	-.346	-.225	-.326	-.143	-.321	-.262	-.282	-.159	-.326	-.001	-.318
4	4	-.097	-.142	-.190	-.096	-.214	-.067	-.306	-.058	-.356	-.048	-.347	-.043	-.374	-.078
5	5	-.202	-.025	-.237	-.144	-.215	-.134	-.329	-.124	-.377	-.106	-.387	-.121	-.373	-.196
6	6	-.067	-.144	-.043	-.085	-.030	-.064	-.031	-.060	-.065	-.061	-.041	-.062	-.000	-.031
7	7	-.039	-.113	-.061	-.088	-.027	-.079	-.091	-.071	-.094	-.090	-.024	-.062	-.095	-.076
8	8	-.002	-.025	-.011	-.017	-.022	-.007	-.025	-.026	-.029	-.008	-.021	-.025	-.061	-.038
9	9	-.020	-.012	-.011	-.034	-.018	-.033	-.020	-.026	-.020	-.009	-.017	-.025	-.026	-.038
10	10	-.004	-.048	-.000	-.051	-.002	-.050	-.008	-.058	-.008	-.046	-.017	-.049	-.032	-.068

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG							
1	1	-.155	-.355	-.318	-2.919	7.778	-9.603	4.304	-7.334	2.644	-3.935	1.987	-3.174	1.268	-3.174
2	2	-.375	-.861	-.348	-2.902	-.193	-.581	-.090	-.551	-.021	-.372	-.066	-.367	-.066	-.367
3	3	-.145	-.307	-.121	-.305	-.187	-.371	-.014	-.351	-.021	-.372	-.021	-.372	-.021	-.372
4	4	-.222	-.009	-.208	-.006	-.394	-.043	-.312	-.011	-.279	-.031	-.055	-.031	-.055	-.031
5	5	-.415	-.059	-.409	-.049	-.419	-.022	-.394	-.037	-.394	-.038	-.055	-.038	-.055	-.038
6	6	-.039	-.055	-.019	-.060	-.030	-.051	-.069	-.009	-.069	-.068	-.012	-.068	-.012	-.068
7	7	-.096	-.055	-.088	-.052	-.046	-.051	-.005	-.009	-.005	-.010	-.005	-.010	-.005	-.010
8	8	-.029	-.016	-.020	-.000	-.007	-.009	-.024	-.013	-.024	-.013	-.003	-.013	-.003	-.013
9	9	-.019	-.036	-.022	-.017	-.042	-.027	-.024	-.028	-.024	-.028	-.003	-.028	-.003	-.028
10	10	-.023	-.036	-.017	-.017	-.009	-.028	-.018	-.028	-.018	-.028	-.003	-.028	-.003	-.028

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG								
1	1	1.372	-2.356	1.429	-1.662	1.437	-2.374	1.437	-2.374	1.437	-2.374	1.437	-2.374	1.437	-2.374
2	2	-.071	-.375	-.046	-1.012	-.061	-.893	-.061	-.893	-.061	-.893	-.061	-.893	-.061	-.893
3	3	-.217	-.012	-.135	-.065	-.137	-.374	-.137	-.374	-.137	-.374	-.137	-.374	-.137	-.374
4	4	-.347	-.084	-.235	-.029	-.417	-.035	-.417	-.035	-.417	-.035	-.417	-.035	-.417	-.035
5	5	-.007	-.060	-.009	-.061	-.007	-.035	-.007	-.035	-.007	-.035	-.007	-.035	-.007	-.035
6	6	-.060	-.059	-.062	-.063	-.062	-.047	-.062	-.047	-.062	-.047	-.062	-.047	-.062	-.047
7	7	-.005	-.033	-.009	-.012	-.001	-.005	-.001	-.005	-.001	-.005	-.001	-.005	-.001	-.005
8	8	-.021	-.045	-.013	-.013	-.024	-.001	-.024	-.001	-.024	-.001	-.024	-.001	-.024	-.001
9	9	-.026	-.045	-.013	-.013	-.024	-.001	-.024	-.001	-.024	-.001	-.024	-.001	-.024	-.001
10	10	-.026	-.045	-.013	-.013	-.024	-.001	-.024	-.001	-.024	-.001	-.024	-.001	-.024	-.001

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCW PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 53 ALPHA-MCL = 2.0 PDP RUN.PI 11.09
RUN 11 ALPHA-BAR = .5 Q-COMP = 32646
POINT 13 ALPHA-SIGMA = -.5 V-REF = 200.42
COMPUTED FREQUENCY = 15.62, K = .1225
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CP-MAG	012-UPPER PHI	148-UPPER CP-MAG	148-UPPER PHI	261-UPPER CP-MAG	261-UPPER PHI	392-UPPER CP-MAG	392-UPPER PHI	530-UPPER CP-MAG	530-UPPER PHI	661-UPPER CP-MAG	661-UPPER PHI
1	1	1.044	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
2	2	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
3	3	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
4	4	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
5	5	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
6	6	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
7	7	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
8	8	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
9	9	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05
10	10	1.047	140.01	2.354	177.19	1.817	215.23	2.419	256.88	3.192	255.09	3.272	259.05

X	N	774-UPPER CP-MAG	774-UPPER PHI	910-UPPER CP-MAG	910-UPPER PHI	062-UPPER CP-MAG	062-UPPER PHI	148-UPPER CP-MAG	148-UPPER PHI	261-UPPER CP-MAG	261-UPPER PHI
1	1	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
2	2	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
3	3	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
4	4	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
5	5	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
6	6	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
7	7	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
8	8	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
9	9	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22
10	10	3.359	267.32	2.936	276.22	2.936	276.22	2.936	276.22	2.936	276.22

X	N	392-LOWER CP-MAG	392-LOWER PHI	530-LOWER CP-MAG	530-LOWER PHI	661-LOWER CP-MAG	661-LOWER PHI	774-LOWER CP-MAG	774-LOWER PHI	910-LOWER CP-MAG	910-LOWER PHI
1	1	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
2	2	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
3	3	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
4	4	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
5	5	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
6	6	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
7	7	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
8	8	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
9	9	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22
10	10	2.727	300.26	2.868	299.89	1.932	300.60	2.936	276.22	2.936	276.22

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE S3 ALPHA-MCL = 2.0 PDP RUN.PT 11.09
RUN 11 ALPHA-PAR = .5 Q-COMP = 32646
POINT 13 SIGMA = -45. V-REF = 200.42
COMPUTED FREQUENCY = 15.62, K = .1225

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	16.853	-9.430	4.994	-4.050	3.472	-2.123	2.012
2	-.655	1.067	-.208	.119	-.197	.056	-.183
3	-.653	.354	-.205	.047	-.077	.046	-.072
4	-.297	-.185	-.065	.098	-.045	.116	-.040
5	.037	-.187	-.091	.019	-.050	.080	-.022
6	.037	-.141	.018	-.026	.019	.000	-.001
7	.008	.361	-.012	.012	-.026	.016	-.031
8	-.005	.334	-.006	.026	-.015	.008	-.034
9	-.006	.340	-.017	.013	-.000	.035	-.013
10			.001	-.016	-.013	.002	-.022

X	.774	.860	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	1.160	1.475	1.277
2	-.070	.007	-.027
3	.008	.068	.028
4	.003	.030	.040
5	.005	.013	.042
6	.005	.016	.006
7	.034	.008	.010
8	.008	.017	.022
9	.008	.017	.010
10	.016	.019	.016

*** STABILITY PARAMETER

* XI = .8632 *

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	.783	-3.325	1.077	-3.739	4.106
2	.384	-1.391	.607	-1.044	-.721
3	-.090	.515	-.077	.587	-.423
4	-.349	.515	-.408	.194	-.090
5	.415	-.218	.460	-.250	-.075
6	-.064	.342	.041	.063	.140
7	.023	-.197	.065	-.166	-.039
8	-.028	.303	.037	-.034	-.052
9	.018	.351	.024	-.023	.017
10				.070	.036

*** WALL PRESSURES, PER RADIAN ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 53 ALPHA-MCL = 2.0 POP RUN-PT 11.09
 RUN 11 ALPHA-BAR = .5 Q-COMP = 32646
 POINT 13 SIGMA = -.45 V-PREF = 200.42
 COMPUTED FREQUENCY = 15.62, K = .1225
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	.012		.062		.148		.261		.392		.530		.661	
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
2	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
3	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
4	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
5	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
6	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
7	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
8	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
9	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38
10	24	.091	314.39	12.667	311.89	6	.430	320.96	4	.069	328.55	2	.448	146.38

X	.774		.860		.910		CM-MAG		PHIM	
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	N	CM-MAG	N	PHIM
1	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
2	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
3	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
4	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
5	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
6	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
7	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
8	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
9	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48
10	1	.877	51.80	1.508	32.11	.957	55.75	3	3.00	337.48

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	.125		.000		.125		.500		.125		.500		.125		.500	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
2	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
3	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
4	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
5	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
6	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
7	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
8	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
9	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11
10	1	3.416	263.24	3.891	286.07	4.471	164.89	1.781	292.11	3.241	32	1.13	96.69	1.125	277.11	1.125	277.11

*** STABILITY PARAMETER

XI = .8632

ORIGINAL PAGE IS
OF POOR QUALITY

QCHT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

MODE 1 --

FILE 55 ALPHA-MCL = 2.0 POP RUN-PT 11.11
RUN 11 ALPHA-PAR = .5 O-COMP = .32455
POINT 5 SIGMA = .45 V-REF = 199.85
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED FREQUENCY = 19.26, K = .1514

X	N	CPREAL	CPIMAG	062-UPPER	062-LOWER	261-UPPER	261-LOWER	392-UPPER	392-LOWER	530-UPPER	530-LOWER	661-UPPER	661-LOWER
1	9	9.436	7.950	-5.030	-5.030	-2.680	-2.680	-2.042	-2.042	-2.185	-2.185	-2.077	-2.077
2	8	1.153	1.494	-2.254	-2.254	-2.216	-2.216	-1.126	-1.126	-2.402	-2.402	-2.341	-2.341
3	7	1.375	1.114	-2.226	-2.226	-1.133	-1.133	-1.181	-1.181	-1.126	-1.126	-1.054	-1.054
4	6	1.522	1.035	-2.094	-2.094	-1.140	-1.140	-1.196	-1.196	-1.189	-1.189	-1.163	-1.163
5	5	1.159	1.130	-2.094	-2.094	-1.072	-1.072	-1.155	-1.155	-1.050	-1.050	-1.038	-1.038
6	4	1.210	1.196	-2.242	-2.242	-1.251	-1.251	-1.260	-1.260	-1.256	-1.256	-1.193	-1.193
7	3	1.017	1.011	-2.026	-2.026	-1.028	-1.028	-1.118	-1.118	-1.022	-1.022	-1.048	-1.048
8	2	1.000	1.011	-2.007	-2.007	-1.009	-1.009	-1.110	-1.110	-1.015	-1.015	-1.000	-1.000
9	1	1.014	1.021	-2.004	-2.004	-1.006	-1.006	-1.011	-1.011	-1.012	-1.012	-1.014	-1.014
10	0	1.014	1.021	-2.004	-2.004	-1.006	-1.006	-1.011	-1.011	-1.012	-1.012	-1.014	-1.014

X	N	CPREAL	CPIMAG	060-UPPER	060-LOWER	012-UPPER	012-LOWER	062-UPPER	062-LOWER	144-UPPER	144-LOWER	261-UPPER	261-LOWER
1	9	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
2	8	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
3	7	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
4	6	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
5	5	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
6	4	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
7	3	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
8	2	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
9	1	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
10	0	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461

X	N	CPREAL	CPIMAG	530-UPPER	530-LOWER	774-UPPER	774-LOWER	860-UPPER	860-LOWER	910-UPPER	910-LOWER	910-UPPER	910-LOWER
1	9	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
2	8	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
3	7	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
4	6	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
5	5	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
6	4	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
7	3	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
8	2	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
9	1	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461
10	0	1.548	2.247	-1.252	-1.252	5.927	5.927	2.404	2.404	1.139	1.139	1.461	1.461

ORIGINAL PAGE IS
OF POOR QUALITY.

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 55 ALPHA-MCL = 2.0 PDR RUN.PI 11.11
 RUN 11 ALPHA-BAP = 4.5 Q-COMP = .32465
 POINT 15 SIGMA = .45 V-REF = 199.85
 COMPUTED FREQUENCY = 19.26, K = .1514

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	12	.318	139.99	.5745	151.13	.313	165.97	.2685	183.44	.2651	219.63	.3017	223.58
2	3	.317	252.79	.394	229.50	.352	217.80	.336	214.60	.299	244.98	.410	191.90
3	4	.156	196.87	.234	194.72	.188	200.30	.153	211.46	.224	216.12	.184	226.81
4	5	.205	219.28	.118	112.26	.123	150.03	.153	156.40	.204	164.23	.204	157.91
5	6	.290	118.64	.245	170.71	.078	208.24	.082	209.26	.061	205.13	.053	217.04
6	7	.103	110.86	.244	153.33	.244	183.74	.254	188.85	.267	173.48	.264	191.94
7	8	.013	270.15	.012	273.37	.049	92.49	.037	150.14	.039	105.94	.041	31.09
8	9	.013	270.15	.012	273.37	.022	279.71	.027	277.27	.037	105.94	.027	272.87
9	10	.026	235.63	.013	252.04	.011	285.69	.015	293.35	.012	334.35	.016	319.50

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	.399	236.21	.412	238.79	.388	237.29	.395	234.97	.406	238.69	.409	234.90
2	3	.156	179.90	.125	237.28	.116	233.29	.220	342.77	.300	176.36	.250	191.39
3	4	.217	201.71	.062	169.78	.226	191.21	.138	196.51	.247	217.28	.093	215.22
4	5	.053	120.40	.066	201.12	.190	179.57	.024	229.97	.056	224.10	.047	215.22
5	6	.053	120.40	.055	124.61	.047	125.43	.057	134.34	.053	122.74	.052	132.95
6	7	.053	120.40	.055	124.61	.047	125.43	.057	134.34	.053	122.74	.052	132.95
7	8	.053	120.40	.055	124.61	.047	125.43	.057	134.34	.053	122.74	.052	132.95
8	9	.053	120.40	.055	124.61	.047	125.43	.057	134.34	.053	122.74	.052	132.95
9	10	.053	120.40	.055	124.61	.047	125.43	.057	134.34	.053	122.74	.052	132.95

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	.245	269.26	.190	255.74	.424	230.06	.969	233.32	.122	256.33	1.291	235.97
2	3	.073	190.81	.137	208.05	.113	164.88	.441	193.82	.382	194.61	.367	209.78
3	4	.073	190.81	.137	208.05	.113	164.88	.441	193.82	.382	194.61	.367	209.78
4	5	.073	190.81	.137	208.05	.113	164.88	.441	193.82	.382	194.61	.367	209.78
5	6	.073	190.81	.137	208.05	.113	164.88	.441	193.82	.382	194.61	.367	209.78
6	7	.073	190.81	.137	208.05	.113	164.88	.441	193.82	.382	194.61	.367	209.78
7	8	.073	190.81	.137	208.05	.113	164.88	.441	193.82	.382	194.61	.367	209.78
8	9	.073	190.81	.137	208.05	.113	164.88	.441	193.82	.382	194.61	.367	209.78
9	10	.073	190.81	.137	208.05	.113	164.88	.441	193.82	.382	194.61	.367	209.78

ORIGINAL PAGE IS
OF POOR QUALITY

MODE I -- CENTER BLADE DATA, WALL STATIONS

FILE 55 ALPHA-MCL = 2.0 POP RUN-PI 11.11
RUN 11 ALPHA-RAP = .5 O-COMP = .32465
POINT 15 SIGMA = -.45 V-DEF = .199.85
COMPUTED FREQUENCY = 19.26, M = .1514

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.561
N	DELCPR UELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	15.813	-9.354	4.574	-3.563	3.141	-1.764	2.025
2	1.470	.836	-.329	.814	-.272	.090	.172
3	-.586	-.053	-.156	.036	-.085	.043	.096
4	-.547	-.054	-.138	.053	-.075	.041	.055
5	-.143	-.267	-.045	.124	-.001	.079	-.060
6	.034	-.407	.091	-.092	.110	-.088	.004
7	.057	-.344	-.004	.006	-.030	.016	.012
8	-.039	-.051	-.033	.014	-.037	.005	.013
9	.021	-.010	-.020	-.021	.002	-.001	.003
10							

X =	.774	.860	.910
N	DELCPR UELCPI	DELCPR DELCPI	DELCPR UELCPI
1	971	1.470	408
2	-.006	.037	-.027
3	-.004	-.059	.016
4	-.008	-.004	.001
5	-.001	.038	.020
6	-.004	.015	.022
7	-.005	-.022	.003
8	-.004	-.003	.003
9			
10			

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	DELCPR UELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	1.089	-1.962	-5.454	-2.269	-1.276
2	-.600	-.125	-.158	-.330	-.260
3	-.232	-.050	-.021	-.192	-.039
4	-.077	-.038	-.121	-.107	-.052
5	-.257	-.087	-.203	-.236	-.072
6	-.030	-.222	-.134	.015	-.011
7	-.019	-.024	-.019	.028	-.022
8	-.020	-.007	-.009	.014	-.005
9	-.001	-.005	-.001	.017	-.001
10					

*** STABILITY PARAMETER ***

N	CMREAL	CMIMAG
1	.641	-.832
2	-.037	-.002
3	-.023	-.005
4	-.006	-.014
5	.006	-.021
6	.002	-.002
7	.003	-.003
8	.000	-.003
9	.000	-.001
10		

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 55 ALPHA-MCL = 2.0 POP RUN-PT 11.11
RUN 11 ALPHA-BAR = .5 Q-COMP = 32465
POINT 15 SIGMA = -.45 V-REF = 199.85
COMPUTED FREQUENCY = 19.26, K = .1514

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	22.290	313.79	11.948	308.48	5.775	321.90	3.602	330.69	2.470	11.87
2	1.072	128.70	.877	112.00	.283	139.47	.190	151.70	.323	147.77
3	.589	55.61	.279	12.80	.160	13.16	.096	26.68	.152	39.35
4	.303	105.61	.132	191.12	.106	287.02	.079	242.18	.093	268.90
5	.303	274.81	.132	169.51	.106	314.46	.079	290.72	.093	100.85
6	.401	304.14	.194	283.44	.129	314.46	.141	321.19	.111	22.07
7	.062	303.25	.020	348.43	.017	160.28	.033	152.41	.024	281.83
8	.027	314.40	.009	309.03	.033	157.57	.045	184.29	.024	217.47
9	.027	314.40	.009	309.03	.004	129.14	.002	27.90	.012	208.30
10										

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	.061	56.56	1.281	41.66	.830	59.85	.190	151.70	.323	147.77
2	.037	164.40	.021	101.93	.037	121.77	.041	139.47	.152	39.35
3	.041	256.57	.018	351.04	.041	292.53	.119	234.37	.093	268.90
4	.039	162.17	.050	226.35	.036	276.54	.097	399.41	.111	22.07
5	.036	108.40	.014	48.72	.023	159.05	.018	152.41	.024	281.83
6	.022	236.16	.027	262.52	.015	258.41	.023	179.08	.024	217.47
7	.006	214.10	.017	144.89	.010	164.95	.016	345.07	.012	208.30
8	.009	296.53	.010	346.33	.008	342.46	.006	204.80		
9										
10										

*** WALL PRESSURES, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	.244	240.96	2.591	247.63	5.856	158.90	2.322	192.23	1.733	135.34
2	.613	191.48	.450	200.55	.563	232.45	.489	208.33	.173	135.34
3	.145	204.48	.124	170.03	.213	202.45	.212	209.20	.092	234.37
4	.244	191.48	.113	138.49	.139	215.97	.227	171.06	.119	234.37
5	.272	198.61	.286	207.93	.350	215.97	.319	153.89	.097	399.41
6	.037	135.50	.051	167.58	.354	182.15	.303	193.60	.077	332.46
7	.037	135.50	.061	113.58	.059	108.75	.053	173.25	.018	152.41
8	.050	194.12	.031	283.79	.019	32.90	.045	113.71	.023	179.08
9	.038	272.08	.015	251.36	.016	305.85	.021	326.17	.016	345.07
10										

*** STABILITY PARAMETER

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	.042	107.98	.062	126.68	.029	191.48
2	.029	191.48	.029	191.48	.015	283.46
3	.015	283.46	.003	313.93	.003	313.93
4	.003	313.93	.004	320.10	.004	320.10
5	.001	371.62	.001	371.62		
6						
7						
8						
9						
10						

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 45 ALPHA-MCL = 2.5 POP RUN-PI 10.06
HUN 10 ALPHA-PAR = 0.5 G-COMP = 32275
POINT 1 ALPHA-SIGMA = 0.0 V-REF = 199.25
COMPUTED FREQUENCY = 9.07, K = .0715

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

N	X	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	-10.226	1.694	0.52	-2.435	-0.718	-1.193	-1.097	.506	-1.746	.732	-1.919	1.301	-2.011
2	-.904	1.017	1.128	-.524	1.137	-.346	1.188	-.282	1.377	-.483	1.185	1.443	1.244
3	-.767	1.216	1.374	-.076	1.535	-.094	1.428	1.017	1.472	1.077	1.602	1.098	1.581
4	-.090	1.435	1.499	-.073	1.733	-.086	1.529	-.098	.575	-.110	.613	-.108	1.579
5	-.054	1.168	1.181	-.257	1.173	-.246	1.137	-.266	.217	-.272	.211	-.246	1.184
6	-.356	1.222	1.175	-.257	1.173	-.246	1.137	-.266	.217	-.272	.211	-.246	1.184
7	-.156	1.477	1.021	-.157	1.117	-.157	1.008	-.186	1.144	-.198	.083	-.130	1.175
8	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020
9	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020
10	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020

N	X	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	-10.226	1.694	0.52	-2.435	-0.718	-1.193	-1.097	.506	-1.746	.732	-1.919	1.301	-2.011
2	-.904	1.017	1.128	-.524	1.137	-.346	1.188	-.282	1.377	-.483	1.185	1.443	1.244
3	-.767	1.216	1.374	-.076	1.535	-.094	1.428	1.017	1.472	1.077	1.602	1.098	1.581
4	-.090	1.435	1.499	-.073	1.733	-.086	1.529	-.098	.575	-.110	.613	-.108	1.579
5	-.054	1.168	1.181	-.257	1.173	-.246	1.137	-.266	.217	-.272	.211	-.246	1.184
6	-.356	1.222	1.175	-.257	1.173	-.246	1.137	-.266	.217	-.272	.211	-.246	1.184
7	-.156	1.477	1.021	-.157	1.117	-.157	1.008	-.186	1.144	-.198	.083	-.130	1.175
8	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020
9	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020
10	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020

N	X	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	-10.226	1.694	0.52	-2.435	-0.718	-1.193	-1.097	.506	-1.746	.732	-1.919	1.301	-2.011
2	-.904	1.017	1.128	-.524	1.137	-.346	1.188	-.282	1.377	-.483	1.185	1.443	1.244
3	-.767	1.216	1.374	-.076	1.535	-.094	1.428	1.017	1.472	1.077	1.602	1.098	1.581
4	-.090	1.435	1.499	-.073	1.733	-.086	1.529	-.098	.575	-.110	.613	-.108	1.579
5	-.054	1.168	1.181	-.257	1.173	-.246	1.137	-.266	.217	-.272	.211	-.246	1.184
6	-.356	1.222	1.175	-.257	1.173	-.246	1.137	-.266	.217	-.272	.211	-.246	1.184
7	-.156	1.477	1.021	-.157	1.117	-.157	1.008	-.186	1.144	-.198	.083	-.130	1.175
8	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020
9	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020
10	-.037	1.037	1.025	-.024	1.022	-.025	1.021	-.038	.533	-.031	.015	-.018	1.020

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE NS ALPHA-MCL = 2.0 PDP RUN PT 10.06
RUN 10 ALPHA-BAR = .5 Q-COMP = .32275
POINT 1 SIGMA = 0. V-REF = 199.25
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	M	012-UPPER		062-UPPER		148-UPPER		201-UPPER		392-UPPER		510-UPPER		661-UPPER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	10	360	170.59	5.574	180.69	2.537	196.43	1.620	222.60	1.817	286.17	2.072	293.18	2.395	302.91
2	10	360	162.00	1.574	159.97	1.357	156.35	1.393	151.50	1.478	126.84	1.518	156.10	1.925	151.15
3	10	360	146.61	1.639	156.94	1.668	157.33	1.696	157.33	1.789	126.84	1.931	156.10	1.925	151.15
4	10	360	130.75	1.506	149.50	1.548	149.46	1.537	140.16	1.535	112.63	1.633	140.21	1.586	120.33
5	10	360	114.82	1.329	147.93	1.298	149.63	1.281	150.87	1.266	112.63	1.341	154.33	1.272	115.17
6	10	360	98.90	1.158	145.20	1.135	149.63	1.124	135.44	1.109	112.63	1.249	159.00	1.036	120.33
7	10	360	83.00	0.987	142.33	0.963	146.72	0.947	133.68	0.933	112.63	1.047	159.00	0.824	120.33
8	10	360	67.10	0.816	139.46	0.792	143.85	0.777	130.82	0.762	112.63	0.834	159.00	0.610	120.33
9	10	360	51.20	0.645	136.59	0.621	140.94	0.606	127.95	0.590	112.63	0.656	159.00	0.396	120.33
10	10	360	35.30	0.474	133.72	0.450	138.03	0.435	125.08	0.419	112.63	0.524	159.00	0.224	120.33

X	M	012-LOWER		062-LOWER		148-LOWER		201-LOWER		392-LOWER		510-LOWER		661-LOWER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	508	309.44	2.540	312.54	2.562	313.45	2.584	314.36	2.606	315.27	2.628	316.18	2.650	317.09
2	2	508	293.59	1.895	296.74	1.873	299.89	1.851	303.04	1.829	306.19	1.807	309.34	1.785	312.49
3	2	508	277.74	1.593	280.89	1.571	284.04	1.549	287.19	1.527	290.34	1.505	293.49	1.483	296.64
4	2	508	261.89	1.291	265.04	1.269	268.19	1.247	271.34	1.225	274.49	1.203	277.64	1.181	280.79
5	2	508	246.04	1.089	249.19	1.067	252.34	1.045	255.49	1.023	258.64	1.001	261.79	0.979	264.94
6	2	508	230.19	0.887	233.34	0.865	236.49	0.843	239.64	0.821	242.79	0.799	245.94	0.777	249.09
7	2	508	214.34	0.685	217.49	0.663	220.64	0.641	223.79	0.619	226.94	0.597	230.09	0.575	233.24
8	2	508	198.49	0.483	201.64	0.461	204.79	0.439	207.94	0.417	211.09	0.395	214.24	0.373	217.39
9	2	508	182.64	0.281	185.79	0.259	188.94	0.237	192.09	0.215	195.24	0.193	198.39	0.171	201.54
10	2	508	166.79	0.079	169.94	0.057	173.09	0.035	176.24	0.013	179.39	0.001	182.54	0.000	185.69

X	M	012-UPPER		062-UPPER		148-UPPER		201-UPPER		392-UPPER		510-UPPER		661-UPPER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	508	309.44	2.540	312.54	2.562	313.45	2.584	314.36	2.606	315.27	2.628	316.18	2.650	317.09
2	2	508	293.59	1.895	296.74	1.873	299.89	1.851	303.04	1.829	306.19	1.807	309.34	1.785	312.49
3	2	508	277.74	1.593	280.89	1.571	284.04	1.549	287.19	1.527	290.34	1.505	293.49	1.483	296.64
4	2	508	261.89	1.291	265.04	1.269	268.19	1.247	271.34	1.225	274.49	1.203	277.64	1.181	280.79
5	2	508	246.04	1.089	249.19	1.067	252.34	1.045	255.49	1.023	258.64	1.001	261.79	0.979	264.94
6	2	508	230.19	0.887	233.34	0.865	236.49	0.843	239.64	0.821	242.79	0.799	245.94	0.777	249.09
7	2	508	214.34	0.685	217.49	0.663	220.64	0.641	223.79	0.619	226.94	0.597	230.09	0.575	233.24
8	2	508	198.49	0.483	201.64	0.461	204.79	0.439	207.94	0.417	211.09	0.395	214.24	0.373	217.39
9	2	508	182.64	0.281	185.79	0.259	188.94	0.237	192.09	0.215	195.24	0.193	198.39	0.171	201.54
10	2	508	166.79	0.079	169.94	0.057	173.09	0.035	176.24	0.013	179.39	0.001	182.54	0.000	185.69

MODE 1 -- CENTER BLADE GATA, WASH
OCWT PERIODICITY TEST

FILED

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND
COMPUTED FREQUENCY = 9.07, PER RADIAN ***

X =	Δ DELCPR	Δ DELCPI	Δ DELCPR	Δ DELCPI	Δ DELCPR	Δ DELCPI	Δ DELCPR	Δ DELCPI	Δ DELCPR	Δ DELCPI	Δ DELCPR	Δ DELCPI
1	13.793	-5.410	15.782	-3.747	5.402	-1.175	3.597	-1.333	1.321	-0.994	0.811	-0.660
2	.096	.296	-.239	.125	-.087	.133	-.065	-.046	.052	-.230	.094	.060
3	.371	.254	.047	.125	-.087	.133	-.065	-.046	.052	.730	.230	.060
4	.075	.186	.047	.091	-.004	.025	-.002	-.014	.021	.126	.028	-.002
5	-.009	.034	.047	.051	-.004	.015	-.002	-.014	-.019	-.028	-.002	-.002
6	.146	.096	.047	-.052	.037	-.002	.005	.027	.016	-.025	.050	.050
7	.110	-.024	.047	-.037	.035	.022	.021	-.027	.010	-.033	.022	.022
8	.057	.010	.047	.037	.019	.035	-.011	.022	.020	-.014	.014	.014
9	-.051	-.044	.047	.022	-.021	.019	.009	-.031	.009	-.024	-.013	-.009
10	-.031	.103	-.087	.043	-.021	.019	-.017	-.031	-.016	-.013	-.013	-.009

X	.77*		.86D		.91D		N	CMREAL	CMIMAG
	DELCPD	DELCPD	DELCPD	DELCPD	DELCPD	DELCPD			
1	.217	.407	.108	.427	.058	.480	1	2.597	-.327
2	-.055	.055	-.012	.046	-.024	.019	2	.003	-.007
3	.001	.046	-.072	.141	-.024	.051	3	.011	-.007
4	-.013	.052	.008	-.030	.010	.005	4	.003	-.006
5	.029	.016	.054	-.018	-.002	.017	5	.015	-.001
6	-.019	.034	.012	-.091	.085	.027	6	.015	-.007
7	.004	.034	-.044	.005	.004	.013	7	.013	-.006
8	-.003	.033	.025	.017	.002	.013	8	.006	-.002
9	.005	.033	.035	.037	-.006	.005	9	.006	-.002
10	-.009	.032	.003	.037	-.006	.005	10	.006	-.002

*** STABILITY PARAMETER

[illegible]

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 45 ALPHA-MCL = 2.0 PDP RUN-PI 10.06
RUN 10 ALPHA-BAR = 0.5 O-COMP = 32275
POINT 10 ALPHA-SIGMA = 0. V-REF = 199.25
COMPUTED FREQUENCY = 9.07, K = .0715
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661	
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	19.556	343.94	5.534	340.84	1.361	322.22	1.352	322.22
2	29.6	28.82	.137	125.35	.154	132.25	.106	132.25
3	4200	68.00	.093	20.82	.156	228.07	.029	228.07
4	.235	105.51	.028	93.30	.054	305.60	.043	305.60
5	.175	127.72	.016	73.64	.054	305.60	.043	305.60
6	.139	177.48	.037	356.74	.048	209.66	.016	209.66
7	.068	171.73	.039	204.55	.033	209.66	.041	209.66
8	.152	196.91	.042	242.99	.023	220.69	.027	220.69
9	.107	106.57	.029	137.41	.036	210.69	.016	210.69
10								

X =	.774	.860	.910	
N	DELCPH	PHI	DELCPH	PHI
1	.460	62.19	.440	103.75
2	.095	215.62	.048	103.75
3	.054	104.42	.161	241.00
4	.033	110.92	.037	255.26
5	.014	105.06	.015	262.28
6	.011	62.89	.027	292.92
7	.010	194.25	.020	77.65
8			.013	276.99
9			.008	152.77
10			.008	222.50

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	.125	W2	.000	W3	.125	W4	.500	W5	1.125	W6	.500	W7	1.125	W8	1.125	W9	1.125	W10	1.125	
GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.069	289.90	2.712	290.68	2.615	290.68	2.712	290.68	2.615	290.68	2.712	290.68	2.615	290.68	2.712	290.68	2.615	290.68	2.712	290.68	
2	.582	148.50	.606	155.89	.606	155.89	.582	148.50	.606	155.89	.606	155.89	.582	148.50	.606	155.89	.606	155.89	.582	148.50	
3	.475	99.33	.279	88.07	.279	88.07	.475	99.33	.279	88.07	.279	88.07	.475	99.33	.279	88.07	.279	88.07	.475	99.33	
4	.795	114.85	.392	99.16	.392	99.16	.795	114.85	.392	99.16	.392	99.16	.795	114.85	.392	99.16	.392	99.16	.795	114.85	
5	.414	115.02	.347	135.96	.347	135.96	.414	115.02	.347	135.96	.347	135.96	.414	115.02	.347	135.96	.347	135.96	.414	115.02	
6	.301	114.58	.377	148.46	.377	148.46	.301	114.58	.377	148.46	.377	148.46	.301	114.58	.377	148.46	.377	148.46	.301	114.58	
7	.044	212.54	.177	353.92	.177	353.92	.044	212.54	.177	353.92	.177	353.92	.044	212.54	.177	353.92	.177	353.92	.044	212.54	
8	.025	114.58	.077	353.92	.077	353.92	.025	114.58	.077	353.92	.077	353.92	.025	114.58	.077	353.92	.077	353.92	.025	114.58	
9	.025	114.58	.077	353.92	.077	353.92	.025	114.58	.077	353.92	.077	353.92	.025	114.58	.077	353.92	.077	353.92	.025	114.58	
10	.025	114.58	.077	353.92	.077	353.92	.025	114.58	.077	353.92	.077	353.92	.025	114.58	.077	353.92	.077	353.92	.025	114.58	

*** STABILITY PARAMETER

WALL NO.	W1	.125	W2	.000	W3	.125	W4	.500	W5	1.125	W6	.500	W7	1.125	W8	1.125	W9	1.125	W10	1.125	
GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.069	289.90	2.712	290.68	2.615	290.68	2.712	290.68	2.615	290.68	2.712	290.68	2.615	290.68	2.712	290.68	2.615	290.68	2.712	290.68	
2	.982	188.50	.606	155.89	.606	155.89	.982	188.50	.606	155.89	.606	155.89	.982	188.50	.606	155.89	.606	155.89	.982	188.50	
3	.795	99.33	.279	88.07	.279	88.07	.795	99.33	.279	88.07	.279	88.07	.795	99.33	.279	88.07	.279	88.07	.795	99.33	
4	.414	114.85	.392	99.16	.392	99.16	.414	114.85	.392	99.16	.392	99.16	.414	114.85	.392	99.16	.392	99.16	.414	114.85	
5	.301	115.02	.347	135.96	.347	135.96	.301	115.02	.347	135.96	.347	135.96	.301	115.02	.347	135.96	.347	135.96	.301	115.02	
6	.044	212.54	.177	148.46	.177	148.46	.044	212.54	.177	148.46	.177	148.46	.044	212.54	.177	148.46	.177	148.46	.044	212.54	
7	.025	114.58	.077	353.92	.077	353.92	.025	114.58	.077	353.92	.077	353.92	.025	114.58	.077	353.92	.077	353.92	.025	114.58	

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 47 ALPHA-MCL = 2.0 PDP RUN, PT 10.08
RUN 10 ALPHA-BAP = .5 Q-COMP = 32683
POINT 13 SIGMA = 0. V-REF = 200.47
COMPUTED FREQUENCY = 15.44, K = .1210

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER CPREAL	CPIMAG	.198-UPPER CPREAL	CPIMAG	.261-UPPER CPREAL	CPIMAG	.392-UPPER CPREAL	CPIMAG	.510-UPPER CPREAL	CPIMAG	.661-UPPER CPREAL	CPIMAG
1	1	-.9	.013	2.310	-.002	1.046	-.006	1.264	-.055	.284	-.037	.439	-.109	1.016	-.199
2	2	.002	-.002	-.002	-.002	-.002	-.002	.524	-.010	.670	-.043	.521	-.109	.309	-.100
3	3	.060	-.002	-.002	-.002	-.002	-.002	.219	-.010	.299	-.043	.294	-.102	.309	-.046
4	4	.040	-.002	-.002	-.002	-.002	-.002	.234	-.011	.262	-.043	.236	-.102	.215	-.107
5	5	.077	-.002	-.002	-.002	-.002	-.002	.081	-.011	.082	-.043	.082	-.102	.095	-.157
6	6	.020	-.002	-.002	-.002	-.002	-.002	.028	-.011	.013	-.043	.041	-.102	.028	-.031
7	7	.001	-.002	-.002	-.002	-.002	-.002	.085	-.011	.101	-.043	.103	-.102	.093	-.031
8	8	.008	-.002	-.002	-.002	-.002	-.002	.007	-.011	.111	-.043	.008	-.102	.009	-.002
9	9	.033	-.002	-.002	-.002	-.002	-.002	.031	-.011	.021	-.043	.032	-.102	.023	-.041
10	10	.037	-.002	-.002	-.002	-.002	-.002	.033	-.011	.033	-.043	.032	-.102	.025	-.001

X	N	CPREAL	CPIMAG	.660-UPPER CPREAL	CPIMAG	.910-UPPER CPREAL	CPIMAG	.012-UPPER CPREAL	CPIMAG	.062-UPPER CPREAL	CPIMAG	.198-UPPER CPREAL	CPIMAG	.261-UPPER CPREAL	CPIMAG
1	1	1.200	-.094	1.384	-.005	1.303	-.063	7.644	-1.473	5.290	-1.770	2.564	-.046	1.976	-.314
2	2	.605	-.077	.642	-.061	.636	-.078	.570	-.259	.509	-.217	.523	-.128	.573	-.100
3	3	.209	-.059	.237	-.060	.279	-.046	.347	-.044	.356	-.014	.282	-.019	.261	-.042
4	4	.114	-.035	.141	-.030	.208	-.032	.148	-.017	.205	-.015	.215	-.015	.223	-.096
5	5	.091	-.025	.114	-.023	.117	-.019	.050	-.015	.009	-.014	.050	-.017	.088	-.055
6	6	.091	-.037	.084	-.037	.073	-.050	.119	-.025	.097	-.017	.045	-.015	.086	-.007
7	7	.012	-.006	.004	-.004	.019	-.010	.003	-.010	.003	-.011	.007	-.000	.001	-.007
8	8	.029	-.037	.027	-.043	.027	-.043	.008	-.013	.010	-.018	.013	-.021	.001	-.002
9	9	.029	-.037	.027	-.043	.027	-.043	.008	-.013	.010	-.018	.013	-.021	.001	-.002
10	10	.029	-.037	.027	-.043	.027	-.043	.008	-.013	.010	-.018	.013	-.021	.001	-.002

X	N	CPREAL	CPIMAG	.530-UPPER CPREAL	CPIMAG	.661-UPPER CPREAL	CPIMAG	.774-UPPER CPREAL	CPIMAG	.860-UPPER CPREAL	CPIMAG	.910-UPPER CPREAL	CPIMAG
1	1	1.413	-.010	1.555	-.027	.872	-.035	1.276	-.086	1.165	-.017	1.174	-.021
2	2	.512	-.007	.628	-.039	.709	-.016	.622	-.086	.562	-.039	.634	-.032
3	3	.242	-.028	.288	-.034	.237	-.010	.238	-.033	.241	-.014	.250	-.032
4	4	.126	-.017	.161	-.017	.142	-.008	.125	-.017	.110	-.012	.136	-.016
5	5	.074	-.009	.098	-.004	.084	-.005	.066	-.008	.069	-.012	.075	-.016
6	6	.016	-.003	.023	-.003	.022	-.002	.022	-.012	.021	-.012	.021	-.012
7	7	.005	-.001	.008	-.001	.008	-.001	.008	-.001	.008	-.001	.008	-.001
8	8	.015	-.002	.019	-.002	.014	-.002	.014	-.002	.014	-.002	.014	-.002
9	9	.015	-.002	.019	-.002	.014	-.002	.014	-.002	.014	-.002	.014	-.002
10	10	.015	-.002	.019	-.002	.014	-.002	.014	-.002	.014	-.002	.014	-.002

MODE 1 -- CENTER PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 47 ALPHA-MCL = 2.0 PDP RUN-PT 10.08
 RUN 10 ALPHA-BAR = .5 Q-COMP = 32663
 POINT 13 SIGMA = 0. V-REF = 200.47
 COMPUTED FREQUENCY = 15.44, K = .1210
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	9	.086	166.49	.410	106.29	.410	106.29	.410	106.29	.410	106.29	.410	106.29
2	1	.402	359.78	.494	354.48	.494	354.48	.494	354.48	.494	354.48	.494	354.48
3	1	.086	313.85	.160	352.52	.160	352.52	.160	352.52	.160	352.52	.160	352.52
4	1	.086	147.58	.275	142.84	.275	142.84	.275	142.84	.275	142.84	.275	142.84
5	1	.086	208.28	.057	121.97	.057	121.97	.057	121.97	.057	121.97	.057	121.97
6	1	.029	314.36	.032	318.93	.032	318.93	.032	318.93	.032	318.93	.032	318.93
7	1	.029	102.27	.130	115.99	.130	115.99	.130	115.99	.130	115.99	.130	115.99
8	1	.065	180.45	.025	116.84	.025	116.84	.025	116.84	.025	116.84	.025	116.84
9	1	.045	145.60	.049	132.17	.049	132.17	.049	132.17	.049	132.17	.049	132.17
10	1	.045	145.60	.037	150.12	.037	150.12	.037	150.12	.037	150.12	.037	150.12

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
2	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
3	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
4	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
5	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
6	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
7	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
8	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
9	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62
10	1	.233	355.65	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62	.1384	354.62

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
2	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
3	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
4	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
5	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
6	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
7	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
8	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
9	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96
10	1	.471	360.19	.677	21.96	.677	21.96	.677	21.96	.677	21.96	.677	21.96

ORIGINAL PAGE IS
OF POOR QUALITY

WALL NO.	GAP FRACTION	M	W1 -125	W2 .000	W4 125	W6 .500	W10 1.125
			CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL
1	329	232	284	665	764	191	552
2	753	-104	836	-196	686	-063	647
3	309	155	356	173	252	-002	117
4	026	-095	-057	-132	329	-121	377
5	019	218	021	076	-051	116	108
6	078	-014	144	-065	054	-036	059
7	022	030	094	155	124	064	139
8	-020	-060	-068	064	-023	026	031
9	016	014	037	052	040	029	096
10	-025	026	028	008	034	011	005

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 47 ALPHA-MCL = 2.0 POP RUN.PI 10.08
RUN 10 ALPHA-BAR = .5 Q-COMP = 32683
POINT 13 SIGMA = 0. V-REF = 200.47
COMPUTED FREQUENCY = 15.44, K = .1210
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	17.667	347.64	9.979	343.61	4.879	354.49	3.242	1.77	1.317	30.99
2	307.303	20.23	170.275	29.89	0.081	281.23	0.067	317.12	285	222.15
3	306	207.85	0.72	217.38	0.094	16.51	0.022	320.57	0.091	228.24
4	304	207.85	0.72	217.38	0.063	228.56	0.063	220.57	0.067	228.24
5	304	207.85	0.72	217.38	0.101	168.74	0.063	220.57	0.015	228.24
6	304	207.85	0.72	217.38	0.025	77.14	0.077	269.65	0.019	228.24
7	304	207.85	0.72	217.38	0.078	257.14	0.077	269.65	0.042	325.82
8	304	207.85	0.72	217.38	0.015	321.60	0.016	305.89	0.009	316.54
9	304	207.85	0.72	217.38	0.024	330.42	0.021	324.22	0.015	353.80
10	304	207.85	0.72	217.38	0.024	330.42	0.021	324.22	0.015	353.80

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	17.667	347.64	9.979	343.61	4.879	354.49	3.242	1.77	1.317	30.99
2	307.303	20.23	170.275	29.89	0.081	281.23	0.067	317.12	285	222.15
3	306	207.85	0.72	217.38	0.094	16.51	0.022	320.57	0.091	228.24
4	304	207.85	0.72	217.38	0.063	228.56	0.063	220.57	0.067	228.24
5	304	207.85	0.72	217.38	0.101	168.74	0.063	220.57	0.015	228.24
6	304	207.85	0.72	217.38	0.025	77.14	0.077	269.65	0.019	228.24
7	304	207.85	0.72	217.38	0.078	257.14	0.077	269.65	0.042	325.82
8	304	207.85	0.72	217.38	0.015	321.60	0.016	305.89	0.009	316.54
9	304	207.85	0.72	217.38	0.024	330.42	0.021	324.22	0.015	353.80
10	304	207.85	0.72	217.38	0.024	330.42	0.021	324.22	0.015	353.80

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	17.667	347.64	9.979	343.61	4.879	354.49	3.242	1.77	1.317	30.99
2	307.303	20.23	170.275	29.89	0.081	281.23	0.067	317.12	285	222.15
3	306	207.85	0.72	217.38	0.094	16.51	0.022	320.57	0.091	228.24
4	304	207.85	0.72	217.38	0.063	228.56	0.063	220.57	0.067	228.24
5	304	207.85	0.72	217.38	0.101	168.74	0.063	220.57	0.015	228.24
6	304	207.85	0.72	217.38	0.025	77.14	0.077	269.65	0.019	228.24
7	304	207.85	0.72	217.38	0.078	257.14	0.077	269.65	0.042	325.82
8	304	207.85	0.72	217.38	0.015	321.60	0.016	305.89	0.009	316.54
9	304	207.85	0.72	217.38	0.024	330.42	0.021	324.22	0.015	353.80
10	304	207.85	0.72	217.38	0.024	330.42	0.021	324.22	0.015	353.80

*** STABILITY PARAMETER

WALL NO. 1 2 3 4 5 6 7 8 9 10
DELCPH 1.317 1.337 1.337 1.337 1.337 1.337 1.337 1.337 1.337 1.337
PHI 30.99 30.99 30.99 30.99 30.99 30.99 30.99 30.99 30.99 30.99
DELCPH 1.317 1.337 1.337 1.337 1.337 1.337 1.337 1.337 1.337 1.337
PHI 30.99 30.99 30.99 30.99 30.99 30.99 30.99 30.99 30.99 30.99

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 19 ALPHA-MCL = 2.0 POP RUN-PT 10.10
RUN 10 ALPHA-PAR = 0.5 Q-COMP = 12.02
POINT 15 SIGMA = 0.0 V-REF = 199.65
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	9	0.834	2.070	0.556	0.840	-2.607	0.285	-1.534	0.047	-0.081	0.550	0.090	0.442
2	9	0.311	0.295	0.296	0.305	0.246	0.433	0.258	0.450	0.333	0.599	0.194	0.446
3	9	0.072	0.039	0.129	0.033	0.151	0.161	0.141	0.177	0.121	0.098	0.070	0.168
4	9	0.011	0.001	0.067	0.035	0.059	0.063	0.082	0.066	0.065	0.074	0.090	0.094
5	9	0.012	0.001	0.021	0.014	0.021	0.019	0.020	0.009	0.027	0.003	0.028	0.002
6	9	0.019	0.042	0.021	0.019	0.020	0.033	0.013	0.012	0.004	0.019	0.007	0.031
7	9	0.033	0.228	0.025	0.028	0.014	0.033	0.009	0.037	0.005	0.009	0.036	0.021
8	9	0.002	0.031	0.004	0.016	0.004	0.011	0.012	0.007	0.005	0.021	0.007	0.006
9	9	0.002	0.031	0.004	0.016	0.004	0.011	0.012	0.007	0.005	0.021	0.007	0.006
10	9	0.002	0.031	0.004	0.016	0.004	0.011	0.012	0.007	0.005	0.021	0.007	0.006

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	9	0.011	0.227	0.038	0.115	0.227	0.020	7.264	0.646	0.741	0.949	2.233	0.037
2	9	0.050	0.468	0.065	0.405	0.053	0.444	0.031	0.497	0.176	0.494	0.236	0.497
3	9	0.052	0.116	0.065	0.103	0.059	0.195	0.032	0.091	0.038	0.098	0.035	0.132
4	9	0.000	0.020	0.027	0.005	0.032	0.116	0.030	0.049	0.199	0.083	0.137	0.114
5	9	0.000	0.020	0.027	0.005	0.032	0.116	0.030	0.049	0.042	0.013	0.037	0.038
6	9	0.004	0.019	0.011	0.005	0.014	0.022	0.006	0.024	0.037	0.044	0.009	0.048
7	9	0.007	0.033	0.011	0.035	0.009	0.031	0.010	0.029	0.011	0.012	0.015	0.010
8	9	0.007	0.033	0.011	0.035	0.009	0.031	0.010	0.029	0.000	0.000	0.015	0.010
9	9	0.011	0.038	0.009	0.034	0.007	0.024	0.027	0.043	0.014	0.041	0.024	0.040
10	9	0.011	0.038	0.009	0.034	0.007	0.024	0.027	0.043	0.014	0.041	0.024	0.040

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	9	0.066	0.330	0.106	0.833	0.491	0.803	0.800	0.658	0.738	0.982	0.228	0.655
2	9	0.026	0.410	0.261	0.502	0.368	0.432	0.020	0.437	0.226	0.391	0.218	0.432
3	9	0.012	0.147	0.095	0.180	0.060	0.249	0.098	0.166	0.087	0.166	0.042	0.192
4	9	0.000	0.030	0.027	0.064	0.018	0.135	0.027	0.101	0.047	0.101	0.027	0.117
5	9	0.000	0.022	0.008	0.028	0.022	0.028	0.006	0.027	0.026	0.006	0.027	0.006
6	9	0.002	0.016	0.004	0.028	0.006	0.027	0.006	0.012	0.005	0.007	0.008	0.009
7	9	0.003	0.016	0.004	0.028	0.006	0.027	0.006	0.012	0.005	0.007	0.008	0.009
8	9	0.003	0.016	0.004	0.028	0.006	0.027	0.006	0.012	0.005	0.007	0.008	0.009
9	9	0.003	0.016	0.004	0.028	0.006	0.027	0.006	0.012	0.005	0.007	0.008	0.009
10	9	0.003	0.016	0.004	0.028	0.006	0.027	0.006	0.012	0.005	0.007	0.008	0.009

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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FILE 49 ALPHA-MCL = 2.0 POP RUN-PT 10.10
RUN 10 ALPHA-BAR = .5 O-COMP = .32402
POINT 5 SIGMA = 0. V-REF = 199.65
AMPLITUDE AND PHASE ANGLE COMPUTED FREQUENCY = 19.10, K = .1503

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED FREQUENCY

X	.012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
2	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
3	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
4	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
5	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
6	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
7	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
8	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
9	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971
10	10.050	169.147	4.634	199.557	2.623	173.379	1.535	181.777	.556	261.611	.475	281.446	.597	325.971

X	774-UPPER		860-UPPER		910-UPPER		912-LOWER		962-LOWER		148-LOWER		261-LOWER		
	CP	MAG	CP	MAG	CP	MAG	CP	MAG	CP	MAG	CP	MAG	CP	MAG	
1	920	1044	353	89	935	358	76	7	448	5	126	2	223	1	69
2	919	1042	354	77	939	359	91	7	480	5	125	2	223	1	51
3	919	1042	354	77	939	359	91	7	480	5	125	2	223	1	51
4	919	1042	354	77	939	359	91	7	480	5	125	2	223	1	51
5	919	1042	354	77	939	359	91	7	480	5	125	2	223	1	51
6	919	1042	354	77	939	359	91	7	480	5	125	2	223	1	51
7	919	1042	354	77	939	359	91	7	480	5	125	2	223	1	51
8	919	1042	354	77	939	359	91	7	480	5	125	2	223	1	51
9	919	1042	354	77	939	359	91	7	480	5	125	2	223	1	51

X =	392-LOWER		530-LOWER		661-LOWER		774-LOWER		860-LOWER		910-LOWER	
	N	CP-MAG	N	CP-MAG	N	CP-MAG	N	CP-MAG	N	CP-MAG	N	CP-MAG
1	150	21.98	1300	31.72	1017	60.93	1036	39.46	931	37.39	979	41.99
2	148	21.15	1266	62.95	1566	103.58	1082	65.03	937	37.97	984	43.21
3	144	19.04	1203	117.95	170	103.54	119	119.03	872	37.97	1008	48.48
4	129	15.04	1157	243.93	256	265.04	143	243.91	181	117.16	1245	112.02
5	124	12.98	1077	431.93	170	265.61	151	431.91	111	129.17	250	78.78
6	114	9.98	1024	268.93	122	109.13	130	267.27	105	159.39	209	15.15
7	104	7.98	928	105.25	118	109.13	122	87.27	99	139.36	239	43.13
8	94	5.98	805	77.36	116	60.50	116	87.27	99	139.36	239	43.13
9	84	3.98	704	66.71	106	60.50	106	71.49	99	139.36	239	43.13
10	74	1.98	624	86.04	101	84.45	101	85.07	99	139.36	239	43.13
11	64	1.12	544	223.04	101	200.36	101	207.71	99	139.36	239	43.13

ORIGINAL PAGE IS
OF POOR QUALITYMODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONSFILF 49 ALPHA-MCL = 2.0 PDP RUN-PT 10.10
RUN 10 ALPHA-BAR = .5 Q-COMP = 32402
POINT 15 SIGMA = 3. V-REF = 199.65
COMPUTED FREQUENCY = 19.10, N = .1503FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	17.098	-3.715	9.298	-2.788	4.830	-2.81	3.146
2	-.152	-.161	-.120	-.099	-.011	-.033	-.036
3	-.314	-.210	-.138	-.108	-.097	-.029	-.062
4	-.354	-.052	-.169	-.033	-.077	-.051	-.062
5	-.061	-.366	-.025	-.038	-.016	-.027	-.014
6	-.042	-.018	-.015	-.030	-.007	-.025	-.038
7	-.013	-.018	-.024	-.021	-.012	-.046	-.003
8	-.048	-.009	-.024	-.057	-.014	-.024	-.003
9	-.039	-.043	-.019	-.023	-.014	-.021	-.003
10	-.016	-.040	-.016	-.014	-.028	-.004	-.027

X =	.774	.860	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	101	-.885	-.207
2	-.001	-.031	-.009
3	-.040	-.030	-.026
4	-.007	-.017	-.016
5	-.002	-.013	-.004
6	-.036	-.031	-.011
7	-.014	-.013	-.013
8	-.008	-.008	-.006
9	-.075	-.007	-.016
10	-.009	-.003	-.004

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	-.106	-.054	-.173	-.206	-.512
2	-.426	-.683	-.412	-.612	-.393
3	-.116	-.193	-.196	-.249	-.199
4	-.178	-.095	-.178	-.076	-.126
5	-.045	-.323	-.031	-.078	-.133
6	-.042	-.245	-.067	-.067	-.017
7	-.019	-.000	-.029	-.040	-.003
8	-.019	-.243	-.011	-.026	-.036
9	-.024	-.043	-.014	-.055	-.024
10	-.014	-.305	-.000	-.020	-.036

*** STABILITY PARAMETER

* XI = .2136 *

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 49 ALPHA-ACL = 2.0 PDP RUN,PT 10.10
RUN 10 ALPHA-BAR = 0.5 Q-COMP = 32.02
POINT 5 SIGMA = 0. V-REF = 199.65
COMPUTED FREQUENCY = 19.10, K = .1503
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	17.497	132.74	9.707	343.31	4.838	356.67	3.165	160.35	1.509	40.51	1.516	47.91	1.218	90.20
2	22.429	126.15	1.756	140.55	.035	101.65	.039	326.35	.217	240.50	.112	104.44	.185	352.14
3	35.180	120.42	.173	191.16	.093	213.20	.074	265.63	.041	240.96	.027	155.49	.069	309.15
4	105.125	117.43	.054	117.43	.059	105.37	.062	120.70	.039	251.34	.024	292.87	.005	312.86
5	213.41	112.52	.033	124.52	.026	105.06	.027	101.07	.017	350.65	.010	92.20	.007	154.65
6	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29
7	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29
8	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29
9	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29
10	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	17.497	132.74	9.707	343.31	4.838	356.67	3.165	160.35	1.509	40.51	1.516	47.91	1.218	90.20
2	22.429	126.15	1.756	140.55	.035	101.65	.039	326.35	.217	240.50	.112	104.44	.185	352.14
3	35.180	120.42	.173	191.16	.093	213.20	.074	265.63	.041	240.96	.027	155.49	.069	309.15
4	105.125	117.43	.054	117.43	.059	105.37	.062	120.70	.039	251.34	.024	292.87	.005	312.86
5	213.41	112.52	.033	124.52	.026	105.06	.027	101.07	.017	350.65	.010	92.20	.007	154.65
6	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29
7	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29
8	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29
9	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29
10	233.41	115.56	.023	115.56	.047	101.21	.055	120.64	.009	40.97	.003	103.71	.004	218.29

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	118	152.99	269	230.06	5.140	173.56	1.198	181.30	1.199	172.18	1.199	172.18	1.199	172.18
2	105	158.06	738	158.06	.526	48.23	.655	162.50	.313	56.66	.313	56.66	.313	56.66
3	225	121.10	317	128.22	.261	130.41	.251	125.64	.322	160.08	.322	160.08	.322	160.08
4	202	208.06	.087	155.22	.171	227.46	.090	220.33	.165	239.12	.165	239.12	.165	239.12
5	051	225.08	.084	248.22	.134	234.65	.081	235.83	.226	235.05	.226	235.05	.226	235.05
6	019	238.00	.049	253.35	.014	210.46	.051	258.20	.070	239.16	.070	239.16	.070	239.16
7	044	240.89	.024	267.32	.041	253.20	.043	257.13	.074	260.86	.074	260.86	.074	260.86
8	049	240.89	.057	276.22	.029	253.17	.027	260.27	.037	265.62	.037	265.62	.037	265.62
9	049	240.89	.057	276.22	.029	253.17	.027	260.27	.037	265.62	.037	265.62	.037	265.62
10	015	241.47	.020	270.94	.037	256.38	.016	260.27	.037	265.62	.037	265.62	.037	265.62

*** STABILITY PARAMETER

W1
W2
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ORIGINAL PAGE
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 192 ALPHA-MCL = 2.0 POP RUN-PI 12.02
RUN 12 ALPHA-BAR = 5.5 C-COMP = 13277
POINT 1 SIGMA = 45. V-REF = 139.26
COMPUTED FREQUENCY = 9.16, K = .0722

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	-12.893	-5.604	-3.379	-1.420	-.406	-.389	-.330
2	-.155	-.039	-.224	-.071	-.325	-.096	-.010
3	-.122	-1.467	-1.060	-1.578	-1.141	-1.206	-1.432
4	-.080	-.553	-.109	-.511	-.102	-.146	-.091
5	-.114	-.092	-.102	-.003	-.113	-.105	-.177
6	-.237	-.049	-.124	-.157	-.296	-.299	-.322
7	-.352	-.065	-.346	-.028	-.167	-.376	-.428
8	-.017	-.046	-.012	-.100	-.031	-.013	-.024
9	-.022	-.049	-.011	-.046	-.061	-.060	-.128
10			-.011	-.046	-.320	-.033	-.036

X	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	-.224	1.074	-.570	769	7.491	3.323	2.472
2	-.178	-1.020	-.210	103	-.136	-.233	-.224
3	-.150	-.567	-1.209	-1.809	-.914	-1.237	-1.186
4	-.099	-.039	-.153	-.558	-.228	-.180	-.072
5	-.331	-.154	-.336	-.010	-.096	-.080	-.072
6	-.408	-.043	-.395	-.175	-.284	-.295	-.313
7	-.005	-.071	-.003	-.027	-.362	-.362	-.372
8	-.085	-.084	-.086	-.076	-.056	-.069	-.021
9	-.008	-.069	-.010	-.071	-.018	-.039	-.089
10						-.032	-.005

X	192-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG
1	1.668	-.892	-.937	465	4.234	7.771
2	-.204	-.045	-.107	-.016	-.215	-.771
3	-.107	-.512	-1.103	-1.726	-.172	-1.178
4	-.064	-.018	-.193	-.020	-.057	-.178
5	-.256	-.142	-.332	-.083	-.331	-.353
6	-.516	-.002	-.392	-.021	-.398	-.385
7	-.072	-.062	-.006	-.059	-.034	-.018
8	-.302	-.050	-.105	-.083	-.094	-.097
9			-.106	-.053	-.065	-.005
10						

MODE 1 -- OCW PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 192 ALPHA-MCL = 2.9 PDP RUN/PT 12:07
RUN 12 ALPHA-MCL = 2.9 Q-COMP = 12277
POINT 1 SIGMA = 45. V-REF = 199.26
COMPUTED FREQUENCY = 9.16. K = .0722
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	012-UPPER	CP-MAG	PHI	062-UPPER	CP-MAG	PHI	14W-UPPER	CP-MAG	PHI	261-UPPER	CP-MAG	PHI	392-UPPER	CP-MAG	PHI	530-UPPER	CP-MAG	PHI	661-UPPER	CP-MAG	PHI	
1	12	.058	203.49	6.878	203.31	3.665	202.79	2.149	200.68	.492	145.67	.777	129.01	1.448	103.16	.492	145.67	.777	129.01	1.448	103.16	.492	145.67	.777	129.01
2	33	.160	194.28	1.851	162.51	1.235	162.45	2.028	152.40	.383	147.93	.0210	129.01	2.433	88.64	.383	147.93	.0210	129.01	2.433	88.64	.383	147.93	.0210	129.01
3	44	.559	98.27	.540	82.66	.522	77.98	2.028	152.40	2.040	79.13	2.624	236.94	2.040	79.13	2.040	79.13	2.624	236.94	2.040	79.13	2.040	79.13	2.624	236.94
4	55	.147	321.02	.105	336.19	.102	358.31	.112	71.78	.543	77.9	.154	20.94	.1775	83.22	.543	77.9	.154	20.94	.1775	83.22	.1775	83.22	.1775	83.22
5	66	.242	148.20	.239	151.49	.287	147.03	.330	21.75	.330	151.04	.359	149.55	.359	147.71	.359	149.55	.359	147.71	.359	149.55	.359	147.71	.359	149.55
6	77	.357	189.94	.337	183.71	.347	184.71	.359	149.55	.405	188.08	.405	187.76	.405	187.76	.405	188.08	.405	187.76	.405	187.76	.405	187.76	.405	187.76
7	88	.087	289.21	.097	286.59	.103	283.57	.091	294.63	.091	294.63	.091	294.63	.091	294.63	.091	294.63	.091	294.63	.091	294.63	.091	294.63	.091	294.63
8	99	.068	293.66	.049	290.40	.047	283.80	.082	293.80	.082	293.80	.082	293.80	.082	293.80	.082	293.80	.082	293.80	.082	293.80	.082	293.80	.082	293.80
9	10	.053	293.87																						

X	N	CE-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	1.093	78.21	1.044	65.37	.957	53.58	1.160	24.38	.975	20.07	1.044	27.75	2.008	78.21	1.044	27.75	2.008	78.21	1.044	27.75	2.008	78.21	1.044	27.75
2	3	2.187	236.47	2.219	153.42	2.234	153.58	2.207	158.87	2.234	158.87	2.234	158.87	2.234	158.87	2.234	158.87	2.234	158.87	2.234	158.87	2.234	158.87	2.234	158.87
3	4	.087	75.18	.597	75.66	.579	74.69	.554	58.87	.612	60.14	.612	60.14	.612	60.14	.612	60.14	.612	60.14	.612	60.14	.612	60.14	.612	60.14
4	5	.078	28.02	.073	32.62	.046	12.42	.042	17.70	.115	136.48	.115	136.48	.115	136.48	.115	136.48	.115	136.48	.115	136.48	.115	136.48	.115	136.48
5	6	.365	155.02	.379	154.24	.379	154.24	.366	158.56	.366	158.56	.366	158.56	.366	158.56	.366	158.56	.366	158.56	.366	158.56	.366	158.56	.366	158.56
6	7	---	187.04	.077	187.39	.077	187.39	.096	187.39	.096	187.39	.096	187.39	.096	187.39	.096	187.39	.096	187.39	.096	187.39	.096	187.39	.096	187.39
7	8	.411	275.26	.069	269.49	.077	272.45	.144	279.84	.132	275.67	.132	275.67	.132	275.67	.132	275.67	.132	275.67	.132	275.67	.132	275.67	.132	275.67
8	9	.119	275.26	.067	278.77	.072	278.18	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84
9	10	.069	275.26	.067	278.77	.072	278.18	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84	.055	279.84

X	N	CP-MAG	PHI	530-LOWER	CP-MAG	PHI	661-LOWER	CP-MAG	PHI	774-LOWER	CP-MAG	PHI	860-LOWER	CP-MAG	PHI	910-LOWER	CP-MAG	PHI
1	12	.891	28.13	1.937	27.16	1.054	27.23	1.060	26.01	1.060	26.01	1.060	26.01	1.060	26.01	1.060	26.01	1.060
2	33	1.922	157.41	2.244	170.33	2.051	150.33	2.261	183.14	2.261	183.14	2.261	183.14	2.261	183.14	2.261	183.14	2.261
3	44	.531	74.65	.643	74.04	.543	74.32	.623	74.21	.623	74.21	.623	74.21	.623	74.21	.623	74.21	.623
4	55	.061	15.84	.083	25.54	.061	15.84	.103	30.26	.103	30.26	.103	30.26	.103	30.26	.103	30.26	.103
5	66	.367	179.72	.451	153.15	.367	179.72	.429	181.77	.429	181.77	.429	181.77	.429	181.77	.429	181.77	.429
6	77	.067	275.26	.075	277.00	.058	275.00	.085	275.57	.085	275.57	.085	275.57	.085	275.57	.085	275.57	.085
7	88	.110	267.17	.151	275.00	.137	275.00	.125	275.49	.125	275.49	.125	275.49	.125	275.49	.125	275.49	.125
8	99	.050	267.17	.069	275.51	.060	275.51	.053	275.49	.053	275.49	.053	275.49	.053	275.49	.053	275.49	.053
9	10																	

MODE 1 -- GCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 192 ALPHA-VCL = 2.0 POP RUN-PI 12.02
HUN 12 ALPHA-BAR = 4.5 Q-COMP = 32277
POINT 1 SIGMA = 45. V-REF = 199.26
COMPUTED FREQUENCY = 9.16, K = 0.722

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIANT ***

X	N	DELCPR ⁰¹²	DELCPR ⁰⁶²	DELCPR ¹⁴⁸	DELCPR ²⁶¹	DELCPR ³⁹²	DELCPR ⁵³⁰	DELCPR ⁶⁶¹
1	23	.476	.137	.137	.137	.137	.137	.137
2	10	.400	.120	.120	.120	.120	.120	.120
3	10	.400	.120	.120	.120	.120	.120	.120
4	10	.400	.120	.120	.120	.120	.120	.120
5	10	.400	.120	.120	.120	.120	.120	.120
6	10	.400	.120	.120	.120	.120	.120	.120
7	10	.400	.120	.120	.120	.120	.120	.120
8	10	.400	.120	.120	.120	.120	.120	.120
9	10	.400	.120	.120	.120	.120	.120	.120
10	10	.400	.120	.120	.120	.120	.120	.120

X	N	DELCPR ⁷⁷⁴	DELCPR ⁸⁶⁰	DELCPR ⁹¹⁰	DELCPR ⁹⁶⁰	DELCPR ⁹⁶⁰	DELCPR ⁹⁶⁰	DELCPR ⁹⁶⁰
1	23	.476	.137	.137	.137	.137	.137	.137
2	10	.400	.120	.120	.120	.120	.120	.120
3	10	.400	.120	.120	.120	.120	.120	.120
4	10	.400	.120	.120	.120	.120	.120	.120
5	10	.400	.120	.120	.120	.120	.120	.120
6	10	.400	.120	.120	.120	.120	.120	.120
7	10	.400	.120	.120	.120	.120	.120	.120
8	10	.400	.120	.120	.120	.120	.120	.120
9	10	.400	.120	.120	.120	.120	.120	.120
10	10	.400	.120	.120	.120	.120	.120	.120

*** WALL PRESSURES, PER RADIANT ***

WALL NO.	GAP FRACTION	N	CPREAL	CPIMAG	W1	W125	W6	W10	W125	W6	W10
1	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
2	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
3	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
4	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
5	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
6	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
7	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
8	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
9	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000
10	1	1	.796	.115	.000	.000	.000	.000	.000	.000	.000

*** STABILITY PARAMETER

N	CMREAL	CMIMAG
1	.000	.000
2	.000	.000
3	.000	.000
4	.000	.000
5	.000	.000
6	.000	.000
7	.000	.000
8	.000	.000
9	.000	.000
10	.000	.000

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OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 192 -- ALPHA-MCL = 2.0 PDP RUN:PT 12:02
RUN 11 ALPHA-SAR = 4.5 Q-COMP: 32277
POINT 12 SIGMA = 45. V-REF = 199.26

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE = 9.16, X = .0722
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 9.16, X =

N	.012		.062		.188		.261		.392		.530		.661	
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
25	.676	23.89	14.447	21.53	7.412	25.30	4.940	24.99	2.163	16.49	2.230	1.570	320.80	78.01
26	.681	23.84	14.229	21.30	.272	25.42	.083	25.97	.114	16.40	.135	.406	320.81	78.01
27	.685	23.79	14.011	21.07	.074	25.53	.042	26.09	.049	16.35	.080	.277	320.82	78.02
28	.689	23.74	13.793	20.84	.074	25.64	.042	26.20	.048	16.30	.075	.147	320.83	78.03
29	.693	23.69	13.575	20.61	.053	25.75	.025	26.31	.048	16.25	.075	.027	320.84	78.04
30	.697	23.64	13.357	20.38	.091	25.86	.025	26.42	.047	16.20	.074	.007	320.85	78.05
31	.701	23.59	13.139	20.15	.014	25.97	.020	26.53	.046	16.15	.073	.000	320.86	78.06
32	.705	23.54	12.921	19.92		26.08		26.64	.045	16.10	.072		320.87	78.07
33	.709	23.49	12.703	19.69		26.19		26.75	.044	16.05	.071		320.88	78.08
34	.713	23.44	12.485	19.46		26.30		26.86	.043	16.00	.070		320.89	78.09
35	.717	23.39	12.267	19.23		26.41		26.97	.042	15.95	.069		320.90	78.10
36	.721	23.34	12.049	19.00		26.52		27.08	.041	15.90	.068		320.91	78.11
37	.725	23.29	11.831	18.77		26.63		27.19	.040	15.85	.067		320.92	78.12
38	.729	23.24	11.613	18.54		26.74		27.30	.039	15.80	.066		320.93	78.13
39	.733	23.19	11.395	18.31		26.85		27.41	.038	15.75	.065		320.94	78.14
40	.737	23.14	11.177	18.08		26.96		27.52	.037	15.70	.064		320.95	78.15

X	77°		86°		91°		N	LN-MAG	PHIN
	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI			
1	950	039	3957	89	497	39	1	3.883	17.206
2	120	039	3957	89	497	39	2	3.184	17.206
3	120	039	3957	89	497	39	3	3.059	17.206
4	120	039	3957	89	497	39	4	3.059	17.206
5	120	039	3957	89	497	39	5	3.059	17.206
6	120	039	3957	89	497	39	6	3.059	17.206
7	120	039	3957	89	497	39	7	3.059	17.206
8	120	039	3957	89	497	39	8	3.059	17.206
9	120	039	3957	89	497	39	9	3.059	17.206
10	120	039	3957	89	497	39	10	3.059	17.206

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	SAP FRACTION	W1 CP-MAG	W1 PHI	W2 CP-MAG	W2 PHI	W4 CP-MAG	W4 PHI	W5 CP-MAG	W5 PHI	W10 CP-MAG	W10 PHI
1	1.073	42.16	1.266	37.83	6.890	200.90	197.75	1.549	197.75	6.893	245.51
2	.363	161.59	2.365	168.46	.213	197.60	159.88	.281	159.88	.173	245.56
3	2.778	224.89	2.891	234.22	2.548	238.60	238.03	2.490	238.03	2.882	245.92
4	.716	75.29	.891	78.52	.688	81.93	79.71	.641	79.71	.546	81.10
5	.088	358.24	.177	296.90	.161	329.25	333.71	.076	333.71	.236	154.78
6	.423	140.89	.397	137.59	.481	191.50	133.09	.394	133.09	.306	150.93
7	.476	174.63	.473	185.77	.115	211.07	178.39	.454	178.39	.202	209.75
8	.162	281.96	.248	260.97	.111	297.47	208.01	.114	208.01	.076	244.61
9	.129	291.78	.094	268.63	.061	164.47	280.17	.106	280.17	.076	170.26
10	.088	391.78	.144	244.07							

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 194 ALPHA-MCL = 2.0 PDP RUN PT 12.04
RUN 12 ALPHA-RAR = .5 C-COMP = .32707
POINT 13 SIGMA = 45. V-PEF = 200.60
COMPUTED FREQUENCY = 15.56, K = .1219
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	M	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.188-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	1	-1.684	-2.823	-7.814	-3.926	-2.555	-2.789	-2.269
2	2	.169	.237	.024	.122	.108	.086	.089
3	3	.039	.020	.130	.112	.164	.062	.068
4	4	.034	.016	.136	.051	.133	.133	.171
5	5	.195	.013	.092	.287	.323	.348	.323
6	6	.020	.095	.025	.112	.125	.094	.121
7	7	.182	.106	.171	.152	.125	.157	.121
8	8	.025	.109	.069	.002	.029	.010	.003
9	9	.039	.015	.019	.013	.029	.022	.048
10	10	.017	.060	.016	.023	.018	.020	.066

X	M	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.188-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	1	-2.067	4.064	-1.976	8.181	4.704	1.063	4.703
2	2	.010	.546	.034	.232	.235	.012	.512
3	3	.128	.020	.156	.205	.407	.186	.027
4	4	.104	.041	.107	.084	.079	.077	.006
5	5	.270	.078	.393	.312	.303	.338	.155
6	6	.005	.040	.008	.018	.002	.008	.074
7	7	.129	.040	.128	.071	.100	.083	.044
8	8	.005	.032	.011	.027	.017	.006	.054
9	9	.010	.032	.003	.023	.018	.023	.008
10	10	.009	.049	.009	.026	.017	.013	.032

X	M	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	.509	3.703	.993	-1.736	-1.817	-1.783
2	2	.044	.458	.066	.422	.045	.422
3	3	.172	.017	.192	.190	.168	.173
4	4	.087	.095	.083	.417	.368	.417
5	5	.079	.079	.086	.010	.009	.017
6	6	.021	.021	.027	.001	.009	.011
7	7	.055	.055	.067	.003	.028	.007
8	8	.015	.015	.003	.001	.063	.005
9	9	.015	.015	.003	.001	.005	.005
10	10	.010	.032	.004	.004	.005	.004

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 194 ALPHA-MCL = 2.0 PDP RUN-PT 12.04
RUN 12 ALPHA-BAR = 5.5 Q-COMP = 22707
POINT 13 SIGMA = 45.5 V-REF = 200.60
COMPUTED FREQUENCY = 15.56, N = .1219

FOURIER COEFFICIENTS, AMPLITUDE AND
PER PRESSURES, PER RADIAN ***

N	X = .012-UPPER CP-MAG PHI	.062-UPPER CP-MAG PHI	.148-UPPER CP-MAG PHI	.261-UPPER CP-MAG PHI	.392-UPPER CP-MAG PHI	.530-UPPER CP-MAG PHI	.641-UPPER CP-MAG PHI
1	14.953	177.92	5.427	152.75	3.998	4.537	4.725
2	.291	66.99	.453	101.99	.679	.933	.517
3	.044	20.70	.153	331.45	.169	.168	.068
4	.096	186.06	.123	193.35	.130	.107	.177
5	.097	175.16	.104	156.59	.330	.358	.322
6	.211	350.36	.160	271.56	.127	.162	.147
7	.112	259.86	.071	267.13	.066	.074	.076
8	.041	256.25	.052	242.10	.050	.051	.086

N	X = .774-UPPER CP-MAG PHI	.860-UPPER CP-MAG PHI	.910-UPPER CP-MAG PHI	.012-LOWER CP-MAG PHI	.062-LOWER CP-MAG PHI	.198-LOWER CP-MAG PHI	.261-LOWER CP-MAG PHI
1	5.59	116.06	4.284	116.01	7.056	48.19	4.821
2	.559	191.07	.139	66.99	.453	12.06	.587
3	.110	180.19	.107	175.68	.106	182.14	.085
4	.373	173.73	.394	175.62	.362	175.60	.428
5	.079	186.43	.083	184.84	.083	184.84	.111
6	.135	274.17	.122	258.58	.122	258.58	.043
7	.062	274.53	.064	289.58	.064	289.58	.027
8	.034	273.44	.047	259.44	.047	259.44	.033
9	.050	259.40	.051	258.38	.051	258.38	.042
10					.042	84.17	.041
11					.042	84.17	.041
12					.042	84.17	.041
13					.042	84.17	.041
14					.042	84.17	.041
15					.042	84.17	.041
16					.042	84.17	.041
17					.042	84.17	.041
18					.042	84.17	.041
19					.042	84.17	.041
20					.042	84.17	.041
21					.042	84.17	.041
22					.042	84.17	.041
23					.042	84.17	.041
24					.042	84.17	.041
25					.042	84.17	.041
26					.042	84.17	.041
27					.042	84.17	.041
28					.042	84.17	.041
29					.042	84.17	.041
30					.042	84.17	.041
31					.042	84.17	.041
32					.042	84.17	.041
33					.042	84.17	.041
34					.042	84.17	.041
35					.042	84.17	.041
36					.042	84.17	.041
37					.042	84.17	.041
38					.042	84.17	.041
39					.042	84.17	.041
40					.042	84.17	.041
41					.042	84.17	.041
42					.042	84.17	.041
43					.042	84.17	.041
44					.042	84.17	.041
45					.042	84.17	.041
46					.042	84.17	.041
47					.042	84.17	.041
48					.042	84.17	.041
49					.042	84.17	.041
50					.042	84.17	.041
51					.042	84.17	.041
52					.042	84.17	.041
53					.042	84.17	.041
54					.042	84.17	.041
55					.042	84.17	.041
56					.042	84.17	.041
57					.042	84.17	.041
58					.042	84.17	.041
59					.042	84.17	.041
60					.042	84.17	.041
61					.042	84.17	.041
62					.042	84.17	.041
63					.042	84.17	.041
64					.042	84.17	.041
65					.042	84.17	.041
66					.042	84.17	.041
67					.042	84.17	.041
68					.042	84.17	.041
69					.042	84.17	.041
70					.042	84.17	.041
71					.042	84.17	.041
72					.042	84.17	.041
73					.042	84.17	.041
74					.042	84.17	.041
75					.042	84.17	.041
76					.042	84.17	.041
77					.042	84.17	.041
78					.042	84.17	.041
79					.042	84.17	.041
80					.042	84.17	.041
81					.042	84.17	.041
82					.042	84.17	.041
83					.042	84.17	.041
84					.042	84.17	.041
85					.042	84.17	.041
86					.042	84.17	.041
87					.042	84.17	.041
88					.042	84.17	.041
89					.042	84.17	.041
90					.042	84.17	.041
91					.042	84.17	.041
92					.042	84.17	.041
93					.042	84.17	.041
94					.042	84.17	.041
95					.042	84.17	.041
96					.042	84.17	.041
97					.042	84.17	.041
98					.042	84.17	.041
99					.042	84.17	.041
100					.042	84.17	.041

N	X = .392-LOWER CP-MAG PHI	.530-LOWER CP-MAG PHI	.661-LOWER CP-MAG PHI	.774-LOWER CP-MAG PHI	.860-LOWER CP-MAG PHI	.910-LOWER CP-MAG PHI								
1	3.738	97.83	3.809	118.94	4.207	115.67	3.738	97.83	3.738	97.83	3.738	97.83	3.738	97.83
2	.460	95.48	.184	352.54	.168	356.87	.168	356.87	.168	356.87	.168	356.87	.168	356.87
3	.083	184.84	.091	183.58	.100	178.63	.100	178.63	.100	178.63	.100	178.63	.100	178.63
4	.379	184.84	.425	176.99	.368	178.63	.368	178.63	.368	178.63	.368	178.63	.368	178.63
5	.094	185.69	.104	186.83	.103	186.63	.103	186.63	.103	186.63	.100	184.47	.084	179.09
6	.094	185.69	.095	22.12	.064	267.60	.064	267.60	.064	266.64	.059	265.32	.022	265.32
7	.023	270.58	.042	255.87	.041	263.75	.041	263.75	.041	262.49	.040	263.31	.022	263.31
8	.034	272.79	.046	263.75	.046	263.78	.046	263.78	.046	262.49	.040	264.08	.022	264.08

ORIGINAL PAGE IS
OF POOR QUALITY

OCUT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILF 194 ALPHA-MCL = 2.0 POP RUN-PT 12.04
RUN 12 ALPHA-BAR = .5 Q-COMP = 32707
POINT 13 SIGMA = 45 V-REF = 200.60
COMPUTED FREQUENCY = 15.56, K = .1219
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	
	.012		.062		.148		.261		.392		.530		.661
1	.25	125	27.49	13	87.0	21.67	7.204	28.39	4.681	31.32	2.140	17.05	97.9
2	125	77.41	21.67	21.67	85.21	100	31.794	222	266.68	1.955	23.26	325.07	97.9
3	125	336.40	21.67	21.67	301.91	107	31.794	222	266.68	1.91	194.83	155.07	97.9
4	125	118.21	35.0	35.0	21.47	107	167.82	222	266.68	.077	28.06	155.07	97.9
5	125	118.21	35.0	35.0	154.57	107	167.82	222	266.68	.039	200.22	26.65	97.9
6	125	226.71	35.0	35.0	240.06	107	167.82	222	266.68	.090	303.62	153.5	97.9
7	125	120.04	35.0	35.0	154.63	107	167.82	222	266.68	.011	191.55	133.5	97.9
8	125	155.53	35.0	35.0	46.45	107	167.82	222	266.68	.067	181.70	222.2	97.9
9	125	182.91	35.0	35.0	267.08	107	167.82	222	266.68	.007	258.89	222.2	97.9
10	125	102.55	35.0	35.0	82.88	107	167.82	222	266.68	.039	14.89	222.2	97.9

X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	.457	315.07	.257	308.18	.519	280.66	3.634	211.70	1	1.190	271.53	
2	.128	253.67	.207	263.91	.062	230.83	.088	238.40	2	.020	279.68	
3	.062	253.73	.025	253.19	.025	237.41	.031	229.72	3	.012	279.71	
4	.054	260.28	.007	277.03	.037	224.11	.016	170.63	4	.003	280.32	
5	.054	260.28	.023	328.99	.002	222.97	.050	169.06	5	.004	280.32	
6	.040	222.45	.029	271.16	.022	198.09	.021	255.09	6	.012	282.32	
7	.049	231.96	.009	30.65	.001	263.68	.022	255.09	7	.004	282.32	
8	.016	231.96	.028	263.41	.021	263.68	.016	255.09	8	.001	282.32	
9	.010	231.96	.011	263.41	.008	255.09			9	.001	282.32	
10									10			

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	
1	1	.967	116.18	5	.021	116.36	9	.192	170.82	5	.054	143.66
2	2	.791	90.60	6	.787	198.03	10	.365	286.70	6	.598	58.06
3	3	.264	4.42	7	.233	21.76	11	.174	200.21	7	.405	35.41
4	4	.154	192.35	8	.226	186.78	12	.115	156.80	8	.231	146.41
5	5	.440	149.89	9	.454	147.03	13	.336	156.80	9	.456	71.89
6	6	.130	67.24	10	.180	60.83	14	.145	68.35	10	.115	71.89
7	7	.170	278.91	11	.174	345.51	15	.107	85.54	11	.206	12.60
8	8	.075	278.91	12	.129	253.85	16	.172	16.34	12	.152	12.60
9	9	.055	48.18	13	.057	287.73	17	.101	16.85	13	.017	76.23
10	10	.058	252.80	14	.062	287.73	18	.039	69.77	14	.075	206.35

*** STABILITY PARAMETER ***

1	1.190	27.53
2	.020	279.76
3	.012	299.68
4	.003	310.31
5	.010	328.61
6	.004	338.32
7	.012	322.32
8	.004	324.74
9	.001	324.87
10	.002	336.47

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 196 ALPHA-MCL = 2.0 POP RUN-PT 12.06
KUN 12 ALPHA-RAR = .5 Q-COMP = .31769
POINT 5 SIGMA = .45 V-REF = 197.66
COMPUTED FREQUENCY = 19.21, K = .1526

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X N	CPREAL	UPPER CPIMAG	062-UPPER CPREAL	UPPER CPIMAG	148-UPPER CPREAL	UPPER CPIMAG	261-UPPER CPREAL	UPPER CPIMAG	332-UPPER CPREAL	UPPER CPIMAG	530-UPPER CPREAL	UPPER CPIMAG	661-UPPER CPREAL	UPPER CPIMAG
1	-1.442	.107	-7.592	-1.421	-5.048	-561	-3.697	-.015	-2.271	-.788	-2.440	1.292	-1.909	1.837
2	.618	.070	-.445	.128	.550	.520	.524	-.436	-.371	-.388	.719	-.695	.823	-.665
3	.534	.100	-.092	.167	.416	.117	.460	.069	-.168	.126	.473	-.022	.538	-.024
4	.062	.142	-.009	-.074	-.122	.183	.103	-.235	-.199	.231	.124	-.210	-.058	-.338
5	-.003	.031	-.059	.011	-.005	-.054	-.070	-.031	-.010	-.028	-.010	.001	-.115	-.008
6	-.186	.051	-.088	.053	-.065	.003	-.070	-.047	-.030	.029	-.067	-.001	-.025	-.070
7	-.024	.049	-.032	.034	-.038	.024	-.041	.013	-.038	.029	-.054	-.025	-.048	-.022
8	-.001	.057	-.014	.068	-.015	.066	-.008	-.071	-.010	.084	-.016	-.025	-.004	-.044
9	-.024	.099	-.009	.059	-.007	.047	-.004	-.043	.003	.034	-.006	-.040	-.035	-.062
10														
X N	CPREAL	UPPER CPIMAG	060-UPPER CPREAL	UPPER CPIMAG	010-UPPER CPREAL	UPPER CPIMAG	012-UPPER CPREAL	UPPER CPIMAG	002-UPPER CPREAL	UPPER CPIMAG	148-UPPER CPREAL	UPPER CPIMAG	261-UPPER CPREAL	UPPER CPIMAG
1	-1.753	1.815	-1.626	1.734	-1.569	1.602	8.463	5.130	5.039	2.634	1.325	2.582	366	2.295
2	.648	.082	-.451	.107	.595	.539	.617	-.957	-.108	-.140	.534	-.659	.555	-.597
3	.032	.003	-.028	.124	.429	.124	-.268	.186	-.300	.017	.356	-.166	.381	-.126
4	.051	.041	-.047	.025	.043	.003	.079	.403	-.553	.342	.174	.126	.090	-.327
5	.041	.041	-.038	.038	.035	.003	.027	.031	-.082	.029	.055	.000	.057	-.023
6	.051	.041	-.038	.038	.035	.003	.027	.031	-.082	.029	.055	.000	.057	-.023
7	.051	.041	-.038	.038	.035	.003	.027	.031	-.082	.029	.055	.000	.057	-.023
8	.051	.041	-.038	.038	.035	.003	.027	.031	-.082	.029	.055	.000	.057	-.023
9	.051	.041	-.038	.038	.035	.003	.027	.031	-.082	.029	.055	.000	.057	-.023
10														
X N	CPREAL	UPPER CPIMAG	530-UPPER CPREAL	UPPER CPIMAG	661-UPPER CPREAL	UPPER CPIMAG	774-UPPER CPREAL	UPPER CPIMAG	860-UPPER CPREAL	UPPER CPIMAG	910-UPPER CPREAL	UPPER CPIMAG	910-UPPER CPREAL	UPPER CPIMAG
1	-.272	1.829	-.666	2.054	-1.145	1.631	-1.418	1.577	-1.535	1.717	-1.508	1.343	-1.508	1.343
2	.318	.152	-.449	.162	.314	.161	.601	-.624	-.306	-.537	.389	-.557	.389	-.557
3	.105	.102	-.074	.066	.042	.035	-.051	.147	-.039	-.293	.043	-.204	.043	-.204
4	.050	.041	-.057	.023	.048	.012	-.049	.005	-.052	.003	.043	-.003	.043	-.003
5	.050	.041	-.057	.023	.048	.012	-.049	.005	-.052	.003	.043	-.003	.043	-.003
6	.050	.041	-.057	.023	.048	.012	-.049	.005	-.052	.003	.043	-.003	.043	-.003
7	.050	.041	-.057	.023	.048	.012	-.049	.005	-.052	.003	.043	-.003	.043	-.003
8	.050	.041	-.057	.023	.048	.012	-.049	.005	-.052	.003	.043	-.003	.043	-.003
9	.050	.041	-.057	.023	.048	.012	-.049	.005	-.052	.003	.043	-.003	.043	-.003
10														

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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FILE 196  ALPHA-MCL = 2.0  POP RUN.PT 12.06
RUN 12  ALPHA-BAR = .5  Q-COMP = .31769
POINT 5  SIGMA = 45.  V-REF = 197.66
      COMPUTED FREQUENCY = 19.21, K = .1526
      AMPLITUDE AND PHASE ANGLE

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES: PER RADIAN ***
COMPUTED FREQUENCY

X	= 012-UPPER		= 062-UPPER		= 148-UPPER		= 261-UPPER		= 392-UPPER		= 530-UPPER		= 661-UPPER	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
15	0149	002	7.7243	190.602	5.9897	186.35	3.6827	180.23	2.404	160.87	2.7609	152.99	2.4899	136.03
12	0132	006	7.4631	183.966	4.7320	164.94	3.6827	170.44	2.682	161.14	1.4033	152.99	2.0399	127.11
9	0132	010	7.1975	177.103	4.3204	154.29	3.6827	174.52	2.379	157.47	1.2987	148.54	1.5399	127.11
6	0132	013	6.9153	170.900	3.9555	144.29	3.6827	178.60	2.094	146.67	1.067	140.54	1.1799	127.11
3	0132	016	6.6331	164.697	3.5906	134.29	3.6827	182.68	1.717	138.80	0.886	134.56	0.9399	127.11
0	0132	019	6.3509	158.494	3.2257	124.29	3.6827	186.76	1.340	133.02	0.704	130.32	0.7499	127.11
			6.0687	152.291	2.8608	114.29	3.6827	190.84	0.963	127.24	0.519	126.59	0.5699	127.11
			5.7865	146.088	2.4959	104.29	3.6827	194.92	0.586	121.36	0.334	122.86	0.3849	127.11
			5.5043	139.885	2.1310	94.29	3.6827	199.00	0.259	115.48	0.159	119.36	0.2099	127.11
			5.2221	133.682	1.7661	84.29	3.6827	203.08	0.186	109.60	0.074	113.58	0.1299	127.11
			4.9399	127.479	1.4012	74.29	3.6827	207.16	0.111	103.82	0.049	107.80	0.0999	127.11
			4.6577	121.276	1.0363	64.29	3.6827	211.24	0.036	98.04	0.024	102.02	0.0699	127.11
			4.3755	115.073	0.6714	54.29	3.6827	215.32	0.013	92.26	0.014	96.24	0.0499	127.11
			4.0933	108.870	0.3065	44.29	3.6827	219.40	0.001	86.48	0.007	90.46	0.0299	127.11
			3.8111	102.667	0.1416	34.29	3.6827	223.48	0.000	80.70	0.003	84.68	0.0199	127.11
			3.5289	96.464	0.0767	24.29	3.6827	227.56	0.000	74.92	0.001	78.90	0.0149	127.11
			3.2467	90.261	0.0118	14.29	3.6827	231.64	0.000	69.14	0.000	73.12	0.0099	127.11
			2.9645	84.058	0.0009	4.29	3.6827	235.72	0.000	63.36	0.000	67.34	0.0049	127.11

X =	774-UPPER		860-UPPER		910-UPPER		012-LOWER		062-LOWER		148-LOWER		201-LOWER		
	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	2843	1340	025	3279	1322	156	9133	312	280	51009	274	59	2	275
2	566	169	055	4523	3229	15769	11326	305	251	301	176	24	3	201	326
3	466	154	065	3229	15769	11326	305	251	301	176	24	3	201	326	3
4	352	175	048	0533	20807	1714	5107	231	67	422	154	502	3	303	665
5	0350	190	085	0540	22361	1017	093	199	48	087	196	697	3	059	154
6	225	172	039	0540	22361	1017	093	199	48	087	196	697	3	059	154
7	0515	257	039	0540	22361	1017	093	199	48	087	196	697	3	059	154
8	257	257	039	0540	22361	1017	093	199	48	087	196	697	3	059	154
9	257	257	039	0540	22361	1017	093	199	48	087	196	697	3	059	154
10	257	257	039	0540	22361	1017	093	199	48	087	196	697	3	059	154

[illegible]

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 196 ALPHA-WCL = 2.0 PDP RUN.PT 12.06
RUN 12 ALPHA-PAR = .5 O-COMP = .31769
POINT S SIGMA = .45 V-REF = 197.66
COMPUTED FREQUENCY = 19.21, K = .1526

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.148		.261		.392		.530		.661	
		DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	22	.004	.237	.631	.055	.373	.143	.063	.031	1.999	1.041	1.774	.762	.764	.209
2	22	.001	.551	.449	.903	.017	.139	.031	.161	.019	.165	.024	.061	.229	.257
3	22	.001	.115	.145	.111	.060	.050	.079	.057	.008	.026	.024	.070	.224	.137
4	22	.001	.302	.161	.175	.052	.143	.012	.092	.044	.071	.047	.095	.016	.021
5	22	.001	.215	.056	.097	.050	.084	.056	.053	.049	.049	.010	.020	.050	.021
6	22	.001	.062	.024	.041	.002	.022	.013	.010	.040	.034	.043	.001	.024	.058
7	22	.001	.032	.019	.026	.009	.032	.019	.011	.031	.045	.043	.034	.023	.047
8	22	.001	.103	.019	.073	.009	.060	.001	.035	.004	.045	.011	.002	.048	.018
9	22	.001	.029	.034	.026	.023	.036	.011	.038	.024	.043	.021	.022	.017	.000
10	22	.001	.119	.012	.050	.023	.020	.009	.005	.025	.001	.014	.003	.021	.014

X	N	.774		.860		.910		CNREAL		CNIMAG		CMREAL		CMIMAG	
		DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	22	.004	.237	.631	.055	.373	.143	.063	.031	1.999	1.041	1.774	.762	.764	.209
2	22	.001	.551	.449	.903	.017	.139	.031	.161	.019	.165	.024	.061	.229	.257
3	22	.001	.115	.145	.111	.060	.050	.079	.057	.008	.026	.024	.070	.224	.137
4	22	.001	.302	.161	.175	.052	.143	.012	.092	.044	.071	.047	.095	.016	.021
5	22	.001	.215	.056	.097	.050	.084	.056	.053	.049	.049	.010	.020	.050	.021
6	22	.001	.062	.024	.041	.002	.022	.013	.010	.040	.034	.043	.001	.024	.058
7	22	.001	.032	.019	.026	.009	.032	.019	.011	.031	.045	.043	.034	.023	.047
8	22	.001	.103	.019	.073	.009	.060	.001	.035	.004	.045	.011	.002	.048	.018
9	22	.001	.029	.034	.026	.023	.036	.011	.038	.024	.043	.021	.022	.017	.000
10	22	.001	.119	.012	.050	.023	.020	.009	.005	.025	.001	.014	.003	.021	.014

*** STABILITY PARAMETER

* XI = -.8745 *

WALL NO.	GAP FRACTION	.125		.250		.500		.750		.125		.250		.500		.750	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
2	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
5	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
6	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
7	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
8	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

*** WALL PRESSURES, PER RADIAN ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 196 ALPHA-MCL = 2.0 PDP RUN-PT 12.06
RUN 12 ALPHA-BAR = .5 Q-COMP = .31764
POINT 15 SIGMA = .45 W-REF = .197.66
COMPUTED FREQUENCY = 19.21, K = .1526
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	24.697	21.96	13.266	17.80	7.106	26.25	4.674	29.61	2.254	27.50	1.931	23.26
2	.551	29.86	1.009	243.57	.140	263.14	.164	280.90	.166	263.44	.171	249.40
3	.290	23.47	.238	322.41	.152	350.85	.093	35.81	.028	73.00	.014	171.07
4	.257	23.41	.112	227.42	.198	250.14	.077	277.69	.084	301.90	.106	296.27
5	.109	21.43	.047	219.65	.023	120.84	.077	124.28	.052	134.88	.040	150.27
6	.162	21.44	.034	105.60	.034	105.60	.022	148.40	.054	55.22	.055	141.53
7	.058	245.79	.076	255.28	.042	123.06	.039	106.35	.049	278.16	.030	133.51
8	.119	189.54	.051	104.05	.031	138.75	.010	151.44	.025	182.77	.014	192.27
9												
10												

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	.014	324.69	.216	155.89	.261	283.18	.317	232.57	.433	232.57	.617	232.57
2	.069	22.08	.062	28.17	.045	23.06	.034	6.71	.049	266.72	.073	266.72
3	.038	22.86	.039	51.99	.008	304.80	.004	128.22	.004	128.22	.014	128.22
4	.017	173.60	.014	219.61	.022	103.44	.017	182.47	.014	110.90	.019	110.90
5	.022	173.78	.006	137.14	.025	182.47	.025	182.47	.029	260.09	.027	260.09
6	.021	125.78	.013	15.37	.010	19.38	.027	113.05	.012	113.05		
7	.021	167.25	.015	199.12	.009	231.68						
8	.005	275.35	.008	8.17								
9												
10												

*** STABILITY PARAMETER

W1 = .0745
W2 = .0745
W3 = .0745
W4 = .0745
W5 = .0745
W6 = .0745
W7 = .0745
W8 = .0745
W9 = .0745
W10 = .0745

WALL NO.	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.527	138.15	2.696	139.75	2.917	139.75	3.099	139.75	3.281	139.75	3.463	139.75
2	.550	155.90	.491	153.23	.434	153.23	.377	153.23	.320	153.23	.263	153.23
3	.406	234.44	.365	234.44	.324	234.44	.283	234.44	.242	234.44	.201	234.44
4	.308	200.48	.277	200.48	.246	200.48	.215	200.48	.184	200.48	.153	200.48
5	.210	187.89	.189	187.89	.168	187.89	.147	187.89	.126	187.89	.105	187.89
6	.116	174.16	.101	174.16	.086	174.16	.071	174.16	.056	174.16	.041	174.16
7	.081	159.01	.066	159.01	.051	159.01	.036	159.01	.021	159.01	.006	159.01
8	.060	144.01	.045	144.01	.030	144.01	.015	144.01	.000	144.01		
9												
10												

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- GCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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58 ALPHA-MCL = 2.0 POP RUN-PT 13.09
13 ALPHA-PAR = .5 Q-COMP = 32715
11 SIGMA = 90.0 V-REF = 200.61
COMPUTED FREQUENCY = 9.15, K = .0716

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED

N	X	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	16	208	-7.545	1.091	-3.089	-1.920	-2.364	3.513
2	276	122	0.509	0.253	0.533	0.120	0.366	-0.634
3	191	-	0.660	0.253	-0.120	0.120	-	-0.625
4	371	111	0.746	0.277	-0.768	0.239	-0.036	-0.001
5	293	111	0.277	0.069	0.798	0.268	0.248	-0.705
6	185	577	0.187	0.606	-0.332	0.280	0.268	-0.001
7	190	040	0.304	0.211	0.118	0.362	0.276	-0.745
8	168	1705	0.074	0.165	-0.056	0.298	0.044	-0.137
9	164	017	0.039	0.011	0.002	0.084	0.015	-0.010
10	094	017	0.036	0.011	0.002	0.010	0.005	0.021

X	Y	774-UPPER CPREAL CPI MAG	860-UPPER CPREAL CPI MAG	910-UPPER CPREAL CPI MAG	012-LOWER CPREAL CPI MAG	062-LOWER CPREAL CPI MAG	148-LOWER CPREAL CPI MAG	298-LOWER CPREAL CPI MAG	351-LOWER CPREAL CPI MAG
1	2	-1.797	3.367	-1.165	12.848	8.441	3.697	2.392	3.511
1	3	-1.440	3.303	-1.052	-0.332	-0.224	-0.063	2.052	-0.389
1	4	-0.345	-0.637	-0.901	-0.351	-0.429	-0.073	-0.052	-0.759
1	5	-0.314	-0.601	-0.777	-0.377	-0.233	-0.019	-0.297	-0.700
1	6	-0.307	-0.679	-0.058	-0.359	-0.246	-0.039	-0.255	-0.670
1	7	-0.367	-0.966	-0.051	-0.525	-0.105	-0.027	-0.360	-0.937
1	8	-0.304	-0.922	-0.126	-0.488	-0.052	-0.175	-0.316	-0.774
1	9	-0.364	-1.392	-0.022	-0.530	-0.023	-0.282	-0.301	-1.017
1	10	-0.011	-0.022	-0.022	-0.030	-0.006	-0.003	-0.001	-0.017

X N	•392-LOWER CPREAL CPI MAG	•530-LOWER CPREAL CPI MAG	•661-LOWER CPREAL CPI MAG	•774-LOWER CPREAL CPI MAG	•860-LOWER CPREAL CPI MAG	•910-LOWER CPREAL CPI MAG
1	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
2	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
3	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
4	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
5	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
6	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
7	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
8	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
9	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890
10	1.2449	2.7797	3.9430	2.9894	1.9080	2.0890

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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FILE 50      ALPHA-HCL = 2.0      PDP NUM.PT 13.00
RUN 13      ALPHA-PAR = .5        Q-COMP = 22715
POINT 1      SIGMA = 90.         V-REF = 200.61
                                COMPUTED FREQUENCY = 9.15= K = .0716
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED FREQUENCY

X N	.012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
16	.421	189.23	7.546	178.77	4.729	166.67	3.551	150.44	3.262	126.05	3.928	127.00	4.151	122.08
17	.377	222.04	6.673	209.15	5.511	210.44	5.549	190.07	5.556	191.15	5.589	231.47	5.566	127.05
18	.340	255.04	7.719	261.16	4.814	259.15	6.255	258.67	4.977	247.35	6.370	266.67	6.292	217.09
19	.304	325.97	8.771	288.43	3.764	308.93	8.444	295.78	4.788	287.65	8.677	329.17	8.692	266.65
20	.271	402.70	9.811	317.98	2.885	413.14	2.770	421.73	2.737	429.72	3.002	447.41	3.744	277.33
21	.234	481.67	10.812	349.12	1.634	481.93	1.644	487.79	1.355	497.22	2.752	509.91	2.744	307.15
22	.197	562.39	11.790	380.34	1.090	562.55	1.289	529.29	1.341	530.62	3.351	549.29	3.316	330.60
23	.160	645.03	12.731	410.01	.090	645.57	.074	591.34	1.106	602.11	3.916	629.39	3.889	353.53
24	.123	728.95	13.634	438.00	.041	728.57	.028	655.66	.011	735.21	4.511	668.58	4.503	375.73

[illegible]

X	.392-LOWER		.530-LOWER		.661-LOWER		.774-LOWER		.860-LOWER		.910-LOWER	
	CP	PHI	CP	PHI	CP	PHI	CP	PHI	CP	PHI	CP	PHI
1	3.039	61.520	3.256	73.102	2.380	94.447	2.498	95.057	2.561	97.147	2.726	101.177
2	3.049	61.520	3.266	73.135	2.410	94.497	2.508	95.011	2.580	97.300	2.746	101.217
3	3.059	61.520	3.276	73.168	2.430	94.547	2.528	95.022	2.600	97.452	2.766	101.257
4	3.069	61.520	3.286	73.200	2.450	94.597	2.548	95.033	2.620	97.604	2.786	101.297
5	3.079	61.520	3.296	73.232	2.470	94.647	2.568	95.044	2.640	97.756	2.806	101.337
6	3.089	61.520	3.306	73.264	2.490	94.697	2.588	95.055	2.660	97.908	2.826	101.377
7	3.099	61.520	3.316	73.296	2.510	94.747	2.608	95.066	2.680	98.060	2.846	101.417
8	3.109	61.520	3.326	73.328	2.530	94.797	2.628	95.077	2.700	98.212	2.866	101.457
9	3.119	61.520	3.336	73.360	2.550	94.847	2.648	95.088	2.720	98.364	2.886	101.497
10	3.129	61.520	3.346	73.392	2.570	94.897	2.668	95.099	2.740	98.516	2.906	101.537

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTR BLADE DATA, WALL STATIONS

FILE 58 ALPHA-MCL = 2.0 POP RUN-PT 13.09
RUN 13 ALPHA-RAR = 0.5 O-COMP = 32715
POINT 11 SIGMA = 90.0 V-REF = 205.61

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.149		.261		.392		.530		.661	
		DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP
1	23	.056	.511	15.985	4.494	8.298	2.849	5.481	1.759	3.166	.135	3.307	-.032	2.025	-1.139
2	23	.054	.516	15.224	-1.896	-0.228	-.134	.046	-0.279	.096	-.190	-.170	.082	-.177	.339
3	23	.071	-.254	.313	-.209	.025	-.089	.071	.044	-.035	-.010	.027	.014	-.116	.130
4	23	.087	-.161	-.011	-.148	.037	-.067	-.069	.002	.035	.027	.043	-.075	-.041	.040
5	23	.195	-.238	-.099	-.138	-.041	-.055	-.006	-.037	-.025	-.052	-.000	-.050	.047	.040
6	23	.241	-.389	-.041	-.183	-.014	-.103	.043	-.033	-.078	.048	.016	-.080	-.016	.031
7	23	.239	-.358	.118	-.093	.071	-.048	.016	.025	-.018	-.018	.044	.047	-.018	-.004
8	23	.139	-.258	.073	-.037	.071	-.028	.068	.011	-.017	-.014	.066	.027	.038	-.028
9	23	.216	-.031	-.067	-.024	-.022	-.004	.029	-.019	-.034	-.025	.050	.050	.038	-.046
10	23	-.124	.031	-.030	-.004	-.037	.004	-.029	-.019	-.034	.006	-.039	-.025	-.033	-.001

X	N	.774		.860		.910	
		DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP
1	1	.534	-.863	.439	-.754	.788	-.788
2	1	.021	-.251	.246	-.129	-.090	-.090
3	1	-.014	.022	.070	-.086	.115	-.115
4	1	.034	-.032	.031	.031	.006	.006
5	1	.029	-.007	.009	.009	.061	.061
6	1	.035	-.009	.009	.009	.026	.026
7	1	.013	-.032	.021	.021	.007	.007
8	1	.009	-.046	.011	.011	.015	.015
9	1	.024	-.010	.012	.012	-.015	-.015
10	1	.004	-.004	.016	.016	-.002	-.002

*** STABILITY PARAMETER

* XI = -.5260 *

WALL NO. GAP FRACTION	N	.125		.002		.125		.500		.500		.500		.500		.500	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	.772	4.047	.680	3.982	-.8.230	1.035	-.3.035	2.319	-.3.035	2.319	-.3.035	2.319	-.3.035	2.319	-.3.035	2.319
2	1	.629	-.117	-.759	-.313	-.4.472	-.539	-.584	-.584	-.584	-.584	-.584	-.584	-.584	-.584	-.584	-.584
3	1	.117	-.658	.189	-.727	.022	-.549	-.050	-.622	-.050	-.622	-.050	-.622	-.050	-.622	-.050	-.622
4	1	.326	-.037	.228	-.099	.351	-.138	.376	-.123	.376	-.123	.376	-.123	.376	-.123	.376	-.123
5	1	.191	-.234	.388	-.1.077	.272	-.780	.277	-.824	.277	-.824	.277	-.824	.277	-.824	.277	-.824
6	1	.445	-.101	.487	-.019	.411	-.058	.425	-.059	.425	-.059	.425	-.059	.425	-.059	.425	-.059
7	1	.344	-.192	.311	-.332	.249	-.268	.320	-.211	.320	-.211	.320	-.211	.320	-.211	.320	-.211
8	1	.060	-.078	.107	-.102	.117	-.097	.091	-.071	.091	-.071	.091	-.071	.091	-.071	.091	-.071
9	1	.000	-.029	.050	-.025	-.004	-.005	.128	-.026	.128	-.026	.128	-.026	.128	-.026	.128	-.026
10	1	.000	-.000	.000	-.000	-.000	-.000	.000	-.000	.000	-.000	.000	-.000	.000	-.000	.000	-.000

*** WALL PRESSURES, PER RADIAN ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 58 ALPHA-MCL = 2.0 POP RUN-PT 13.09
RUN 13 ALPHA-BAR = .5 Q-COMP = 32715
POINT 1 SIGMA = 90. V-REF = 200.61
COMPUTED FREQUENCY = 9.15, K = .0716
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
		.012	.062	.182	.261	.392	.530	.661					
1	30	.573	18.12	16.605	15.70	8.774	18.95	5.757	17.79	3.169	2.43	3.307	359.45
2	30	.573	275.94	263.25	258.26	.137	258.26	.083	279.34	.213	296.96	.189	359.45
3	30	.573	283.32	265.69	258.26	.076	258.26	.089	31.60	.051	190.81	.030	359.45
4	30	.573	298.32	265.69	258.26	.069	258.26	.089	278.72	.058	364.50	.007	359.45
5	30	.573	316.42	265.69	258.26	.069	258.26	.089	263.78	.058	364.50	.007	359.45
6	30	.573	318.25	265.69	258.26	.069	258.26	.089	319.11	.058	364.50	.007	359.45
7	30	.573	318.25	265.69	258.26	.069	258.26	.089	319.11	.058	364.50	.007	359.45
8	30	.573	318.25	265.69	258.26	.069	258.26	.089	319.11	.058	364.50	.007	359.45
9	30	.573	318.25	265.69	258.26	.069	258.26	.089	319.11	.058	364.50	.007	359.45
10	30	.573	318.25	265.69	258.26	.069	258.26	.089	319.11	.058	364.50	.007	359.45

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
		.774	.860	.910									
1	1	.770	330.05	.919	298.52	.109	311.74	.094	9.04	.954	9.04	.954	9.04
2	1	.770	274.76	.919	250.51	.124	211.40	.215	254.78	.040	254.78	.040	254.78
3	1	.770	198.31	.919	128.99	.027	128.99	.017	269.73	.017	269.73	.017	269.73
4	1	.770	198.31	.919	128.99	.027	128.99	.017	269.73	.017	269.73	.017	269.73
5	1	.770	198.31	.919	128.99	.027	128.99	.017	269.73	.017	269.73	.017	269.73
6	1	.770	198.31	.919	128.99	.027	128.99	.017	269.73	.017	269.73	.017	269.73
7	1	.770	198.31	.919	128.99	.027	128.99	.017	269.73	.017	269.73	.017	269.73
8	1	.770	198.31	.919	128.99	.027	128.99	.017	269.73	.017	269.73	.017	269.73
9	1	.770	198.31	.919	128.99	.027	128.99	.017	269.73	.017	269.73	.017	269.73
10	1	.770	198.31	.919	128.99	.027	128.99	.017	269.73	.017	269.73	.017	269.73

*** WALL PRESSURES, PER RADIAN ***

WALL STATION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
		.125	.000	.125	.000	.125	.000	.125	.000	.125	.000	.125	.000
1	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
2	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
3	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
4	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
5	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
6	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
7	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
8	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
9	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
10	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62

*** STABILITY PARAMETER

WALL STATION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
		.125	.000	.125	.000	.125	.000	.125	.000	.125	.000	.125	.000
1	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
2	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
3	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
4	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
5	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
6	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
7	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
8	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
9	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62
10	1	.125	79.22	.000	205.62	.125	205.62	.000	205.62	.125	205.62	.000	205.62

ORIGINAL PAGE IS
OF POOR QUALITY

OCNT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 60 ALPHA-MCL = 2.0 PDP RUN-PT 13.11
RUN 13 ALPHA-REF = .5 Q-COMP = .32721
POINT 3 SIGMA = 90. V-REF = 200.63
COMPUTED FREQUENCY = 15.57, K = .1219
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.198-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	15	.723	-4.307	-7.359	-2.573	-4.430	-2.044	-3.086
2	14	.914	.195	.869	.305	.961	.350	.800
3	13	.406	.326	.374	.745	.331	.351	.350
4	12	.163	.136	.234	.173	.261	.183	.288
5	11	.000	.194	.024	.129	.066	.107	.073
6	10	.075	.102	.049	.052	.042	.064	.036
7	9	.100	.076	.049	.055	.038	.065	.036
8	8	.054	.084	.043	.083	.015	.031	.018
9	7	.021	.061	.018	.045	.006	.026	.035
10	6	.061	.052	.045	.031	.036	.026	.035
11	5	.567	.640	.892	.476	.904	1.090	12.574
12	4	.288	.430	.277	.476	.209	.420	.257
13	3	.366	.445	.382	.435	.367	.406	.466
14	2	.050	.161	.051	.157	.041	.179	.163
15	1	.052	.046	.051	.037	.047	.036	.021
16	0	.022	.052	.028	.049	.020	.047	.012
17	0	.022	.052	.028	.049	.020	.047	.012
18	0	.022	.052	.028	.049	.020	.047	.012
19	0	.022	.052	.028	.049	.020	.047	.012
20	0	.022	.052	.028	.049	.020	.047	.012

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG	.961-LOWER CPREAL CPIMAG
1	15	.329	1.062	1.062	.073	.366	.181	.1.636
2	14	.402	.887	.511	.864	.825	.710	.375
3	13	.336	.242	.150	.338	.299	.232	.356
4	12	.030	.025	.018	.006	.365	.360	.155
5	11	.037	.048	.038	.027	.030	.027	.017
6	10	.040	.035	.020	.050	.048	.044	.041
7	9	.019	.021	.022	.021	.027	.029	.049
8	8	.011	.013	.022	.021	.027	.029	.063
9	7	.011	.013	.022	.021	.027	.029	.063
10	6	.011	.013	.022	.021	.027	.029	.063

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 60 ALPHA-MCL = 2.0 PDP RUN-PT 13.11
RUN 13 ALPHA-BAR = 9.5 Q-COMP = .32721
POINT 3 SIGMA = 90. V-REF = 200.63
COMPUTED FREQUENCY = 15.57. K = .1219

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	16	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
2	17	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
3	18	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
4	19	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
5	20	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
6	21	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
7	22	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
8	23	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
9	24	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
10	25	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	26	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
2	27	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
3	28	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
4	29	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
5	30	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
6	31	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
7	32	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
8	33	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
9	34	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
10	35	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	36	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
2	37	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
3	38	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
4	39	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
5	40	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
6	41	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
7	42	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
8	43	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
9	44	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14
10	45	1.303	195.32	7.796	199.27	4.879	204.76	3.518	208.70	2.191	214.17	1.019	218.88	2.343	220.14

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCHI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 60 ALPHA-MCL = 2.0 PDP RUN-PT 13.11
RUN 13 ALPHA-PAR = .5 Q-COMP = .32721
POINT 3 SIGMA = 90. V-REF = 200.63
COMPUTED FREQUENCY = 15.57, K = .1219
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.148		.261		.392		.530		.661	
		DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI
1	28	.297	.076	.247	.085	2.103	.031	1.387	.051	3.141	.025	3.202	.010	1.989	.031
2	29	.076	.065	.840	.058	.021	.021	.051	.018	.100	.034	.079	.036	.138	.074
3	30	.101	.078	.228	.027	.027	.027	.018	.010	.034	.034	.065	.107	.156	.077
4	31	.160	.232	.068	.017	.102	.017	.077	.015	.032	.042	.044	.077	.039	.074
5	32	.084	.084	.025	.032	.001	.016	.015	.014	.005	.014	.043	.002	.027	.011
6	33	.054	.031	.031	.021	.038	.021	.011	.011	.004	.033	.015	.006	.011	.028
7	34	.041	.036	.032	.015	.038	.015	.015	.015	.013	.062	.015	.007	.007	.007
8	35	.015	.037	.049	.048	.001	.017	.015	.015	.014	.012	.006	.006	.007	.007
9	36	.098		.015							.000	.029	.010	.006	.010
10	37														

X	N	.774		.860		.910		.910		.910		.910		.910	
		DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI
1	1.641	.641	.171	.285	.035	.760	.055	.426	.037	.640	.030	.426	.037	.640	.030
2	.063	.063	.064	.109	.077	.134	.050	.140	.036	.030	.036	.140	.036	.030	.036
3	.040	.040	.009	.025	.024	.067	.019	.055	.064	.036	.064	.055	.064	.036	.064
4	.005	.005	.003	.003	.003	.007	.003	.010	.006	.064	.006	.010	.006	.064	.006
5	.028	.028	.006	.008	.003	.001	.002	.006	.011	.001	.011	.006	.011	.001	.011
6	.017	.017	.023	.004	.004	.008	.007	.011	.027	.011	.027	.005	.003	.005	.003
7	.004	.004	.013	.004	.004	.009	.007	.000	.013	.011	.013	.003	.001	.003	.001
8	.014	.014	.003	.001	.001	.008	.002	.005	.003	.005	.003	.001	.001	.005	.001
9															
10															

*** STABILITY PARAMETER

WALL NO. GAP FRACTION	N	.125		.125		.125		.125		.125		.125		.125	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	2	.809	.095	.756	.192	.147	.271	.705	.271	.470	.398	.652	.184	.215	.023
2	3	.452	.240	.519	.419	.198	.419	.147	.419	.470	.398	.470	.398	.215	.023
3	4	.094	.057	.123	.093	.013	.166	.056	.166	.398	.105	.398	.105	.215	.023
4	5	.040	.025	.025	.036	.031	.077	.105	.077	.105	.045	.105	.045	.077	.050
5	6	.059	.035	.046	.114	.058	.117	.058	.117	.058	.117	.058	.117	.058	.117
6	7	.021	.031	.027	.089	.019	.063	.019	.063	.019	.063	.019	.063	.019	.063
7	8	.011	.031	.002	.050	.053	.039	.053	.039	.016	.044	.016	.044	.016	.044
8	9														
9	10														
10															

*** WALL PRESSURES, PER RADIAN ***

* XI = -.3385 *

ORIGINAL PAGE 1
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 60 ALPHA-MCL = 2.0 PDP RUN.PT 13.11
RUN 13 ALPHA-BAR = .5 Q-COMP = .32723
POINT 13 SIGMA = 90. V-REF = 200.63
COMPUTED FREQUENCY = 15.57, K = .1219
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
2	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
3	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
4	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
5	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
6	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
7	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
8	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
9	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
10	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
2	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
3	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
4	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
5	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
6	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
7	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
8	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
9	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50
10	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50	1.752	339.50

*** STABILITY PARAMETER ***

WALL MO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
GAP FRACTION	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
1	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
2	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
3	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
4	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
5	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
6	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
7	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
8	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
9	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59
10	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59	1.294	310.59

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 62 ALPHA-MCL = 2.0 POP RUN-PT 13.13
13 ALPHA-RAR = 2.5 Q-COMP = 12.37
15 ALPHA-SIGMA = 90.0 V-REF = 200.67
COMPUTED FREQUENCY = 19.25, K = .1507
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.140-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	16	1.08	-2.510	-7.506	-6.23	-4.557	-4.587	-2.011
2	15	1.29	-2.028	-7.091	-5.77	-4.061	-4.122	-1.102
3	14	1.82	-1.521	-6.581	-5.290	-3.561	-3.631	-0.002
4	13	2.25	-1.030	-6.070	-4.781	-3.050	-3.120	-0.060
5	12	2.79	-0.540	-5.560	-4.270	-2.540	-2.610	-0.115
6	11	3.33	-0.050	-5.050	-3.760	-2.030	-2.100	-0.168
7	10	3.87	0.440	-4.540	-3.250	-1.520	-1.590	-0.222
8	9	4.41	0.930	-4.030	-2.740	-1.010	-1.080	-0.276
9	8	4.95	1.420	-3.520	-2.230	-0.500	-0.570	-0.330
10	7	5.49	1.910	-3.010	-1.720	-0.490	-0.560	-0.384

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.940-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.140-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	16	1.653	1.993	-1.062	12.742	8.108	1.918	2.397
2	15	2.013	2.421	-1.004	12.566	8.127	1.918	2.397
3	14	2.373	2.849	-0.946	12.390	8.146	1.918	2.397
4	13	2.733	3.277	-0.888	12.214	8.165	1.918	2.397
5	12	3.093	3.705	-0.830	12.038	8.184	1.918	2.397
6	11	3.453	4.133	-0.772	11.862	8.203	1.918	2.397
7	10	3.813	4.561	-0.714	11.686	8.222	1.918	2.397
8	9	4.173	4.989	-0.656	11.510	8.241	1.918	2.397
9	8	4.533	5.417	-0.598	11.334	8.260	1.918	2.397
10	7	4.893	5.845	-0.540	11.158	8.279	1.918	2.397

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.940-LOWER CPREAL CPIMAG
1	16	1.370	1.743	-1.333	13.090	8.395	1.320
2	15	1.730	2.161	-1.275	12.914	8.414	1.320
3	14	2.090	2.579	-1.217	12.738	8.433	1.320
4	13	2.450	2.997	-1.159	12.562	8.452	1.320
5	12	2.810	3.415	-1.101	12.386	8.471	1.320
6	11	3.170	3.833	-1.043	12.210	8.490	1.320
7	10	3.530	4.251	-0.985	12.034	8.509	1.320
8	9	3.890	4.669	-0.927	11.858	8.528	1.320
9	8	4.250	5.087	-0.869	11.682	8.547	1.320
10	7	4.610	5.505	-0.811	11.506	8.566	1.320

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 --- CENTER PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 62 ALPHA-MCL = 2.0 PDP RUN-PT 13.13
RUN 13 ALPHA-BAR = .5 Q-COMP = 12737
POINT 15 ALPHA-SIGMA = 90. V-REF = 200.67
COMPUTED FREQUENCY = 19.25, K = .1507
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	16.303	188.86	7.532	184.75	4.557	180.51	3.158	173.65	2.069	154.00
2	330	154.71	1.178	85.24	2.356	109.87	3.369	116.22	.598	111.40
3	370	240.91	.094	252.54	3.256	258.86	.372	258.25	.418	275.08
4	233	147.91	.083	311.89	.054	62.25	.035	16.37	.113	11.32
5	.061	347.66	.083	354.61	.100	262.25	.124	26.37	.051	211.64
6	.017	291.92	.045	288.57	.059	13.33	.070	247.52	.033	211.64
7	.010	100.08	.005	181.93	.006	13.33	.015	70.78	.036	76.24
8	.007	235.39	.018	343.37	.034	19.80	.018	157.52	.030	156.92
9	.011	54.18	.025	136.97	.028	0.01	.023	157.52	.045	266.84
10	.025	252.14	.027	254.00	.024	259.91	.029	261.74	.045	266.84

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2.339	126.12	2.016	131.40	1.688	129.01	13.467	18.88	8.324	13.31
2	.421	268.92	.472	271.97	.337	269.45	.307	167.71	1.324	135.48
3	.171	232.25	.142	224.09	.052	208.90	.302	200.58	.718	189.94
4	.008	111.48	.080	252.09	.037	26.36	.185	25.85	.138	18.24
5	.024	108.48	.011	123.04	.022	132.00	.106	32.53	.185	257.05
6	.019	127.35	.020	113.22	.021	137.11	.053	119.23	.025	123.30
7	.011	277.35	.003	206.42	.006	249.48	.030	161.53	.019	199.26

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2.064	52.07	1.977	61.88	1.436	95.33	1.283	95.83	1.375	106.24
2	.284	171.91	.367	178.32	.126	111.92	.353	171.76	.325	151.23
3	.079	332.71	.100	236.70	.027	248.37	.034	194.48	.037	260.34
4	.012	255.28	.074	257.07	.055	37.01	.134	274.80	.127	227.52
5	.013	158.86	.049	257.48	.088	262.73	.072	230.26	.059	262.52
6	.031	192.83	.032	154.87	.028	140.59	.015	196.27	.016	183.40
7	.022	200.33	.028	217.86	.026	211.78	.034	216.37	.035	172.13
8	.022	200.33	.028	217.86	.026	211.78	.034	216.37	.035	172.13
9	.022	200.33	.028	217.86	.026	211.78	.034	216.37	.035	172.13
10	.022	200.33	.028	217.86	.026	211.78	.034	216.37	.035	172.13

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 63 ALPHA-MCL = 2.0 POP RUN-PT 13.13
RUN 15 ALPHA-RAB = 0.5 O-COMP = 32737
POINT 15 SIGMA = 90.0 V-REF = 200.67
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.148		.261		.392		.530		.661	
		DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI
1	29	.850	.688	15.614	2.541	8.209	2.489	5.488	1.776	3.129	.721	3.153	.290	1.877	.350
2	.868	.551	-.531	-.197	-.239	-.121	-.030	-.234	-.088	-.116	-.301	-.252	.202	-.081	-.361
3	.378	.052	-.051	-.080	-.135	-.103	-.022	-.149	-.072	.001	.136	-.105	.050	.143	.046
4	.088	-.038	-.031	-.047	-.031	-.080	-.034	-.109	-.078	-.003	-.168	-.026	-.041	-.014	-.025
5	.043	-.088	-.057	-.016	-.016	-.034	-.016	-.027	-.020	.013	.034	-.013	.090	-.019	-.018
6	.048	.043	-.031	-.034	-.016	-.034	.016	.015	-.042	.002	.002	.050	.011	.005	-.002
7	.047	.043	-.031	-.034	-.016	-.034	.016	-.044	.018	.027	.019	-.047	.006	-.020	.004
8	.047	.043	-.031	-.034	-.016	-.034	.016	-.044	.018	.027	.019	-.047	.006	-.020	.004
9	.047	.043	-.031	-.034	-.016	-.034	.016	-.044	.018	.027	.019	-.047	.006	-.020	.004
10	.047	.043	-.031	-.034	-.016	-.034	.016	-.044	.018	.027	.019	-.047	.006	-.020	.004

X	N	.774		.260		.910		CMREAL		CMIMAG	
		DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI	CMREAL	CMIMAG	CMREAL	CMIMAG
1	1	.522	-.415	.949	-.132	.590	-.462	.819	.858	1.272	.370
2	.148	.066	-.066	-.053	-.160	-.003	-.006	-.080	-.038	-.061	-.019
3	.024	.025	-.025	-.042	-.007	-.030	-.005	.003	.040	-.018	-.006
4	.021	.027	-.027	-.016	-.001	-.002	-.011	-.053	.088	-.025	-.010
5	.027	.024	-.024	.016	.017	.006	.012	.009	.047	.004	.006
6	.027	.024	-.024	.016	.017	.006	.012	.009	.047	.004	.006
7	.027	.024	-.024	.016	.017	.006	.012	.009	.047	.004	.006
8	.027	.024	-.024	.016	.017	.006	.012	.009	.047	.004	.006
9	.027	.024	-.024	.016	.017	.006	.012	.009	.047	.004	.006
10	.027	.024	-.024	.016	.017	.006	.012	.009	.047	.004	.006

*** STABILITY PARAMETER

* XI = -.3703 *

WALL NO.	GAP FRACTION	.125		.000		.125		.500		1.125	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	740	.330	-.378	.691	1.969	-.808	-.140	-.2748	.765	.034	-.6.883
2	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647
3	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647
4	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647
5	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647
6	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647
7	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647
8	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647
9	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647
10	.037	.066	-.066	.307	.387	-.042	.052	-.206	.324	-.364	.647

*** WALL PRESSURES, PER RADIAN ***

MODE 1 -- OCUT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 62 ALPHA-WCL = 2.0 POP RUN.PT 13.13
RUN 13 ALPHA-PR = 90.0 Q-COMP = 32737
POINT 15 SIGMA = 90.0 V-REF = 200.67
COMPUTED FREQUENCY = 19.25, K = .1507

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	29.657	13.39	15.920	9.24	8.578	16.87	5.768	17.94	3.211	12.97
2	.881	170.10	.396	202.35	.334	174.79	.250	200.74	.136	248.99
3	.354	10.15	.305	308.58	.123	10.40	.145	25.95	.136	89.74
4	.494	197.81	.267	197.91	.169	217.29	.129	217.01	.168	269.10
5	.132	44.10	.061	44.02	.086	260.62	.073	96.94	.057	143.05
6	.082	237.90	.061	248.94	.038	242.53	.033	322.70	.032	294.50
7	.046	112.58	.031	30.60	.053	45.25	.045	68.89	.004	141.90
8	.020	165.59	.022	140.70	.046	159.38	.051	201.04	.033	226.62
9	.024	112.05	.022	118.38	.053	119.46	.057	201.58	.046	236.96
10					.035	119.21	.041	122.27	.042	115.44

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.574	348.74	.968	348.53	.750	321.93	.595	301.17	.495	286.57
2	.078	120.86	.113	177.83	.097	159.76	.090	238.98	.090	238.98
3	.026	88.41	.042	150.46	.030	351.15	.047	96.20	.047	96.20
4	.028	351.01	.023	146.99	.011	101.41	.021	297.19	.021	297.19
5	.031	14.84	.008	15.25	.012	75.71	.025	193.18	.025	193.18
6	.028	256.57	.019	285.29	.009	282.34	.026	142.95	.026	142.95
7	.013	101.93	.017	140.57	.013	151.85	.027	142.19	.027	142.19
8	.026	197.59	.022	226.72	.017	240.26	.021	142.19	.021	142.19
9										
10										

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.276	71.04	2.087	70.67	8.009	181.00	2.853	164.45	5.483	270.30
2	.502	131.14	.494	128.39	.067	128.74	.384	122.51	.743	119.37
3	.369	275.79	.439	277.93	.359	262.26	.420	268.12	.219	219.57
4	.087	188.06	.118	207.40	.153	69.09	.034	69.10	.082	212.81
5	.165	114.45	.126	20.40	.178	356.94	.144	223.61	.225	66.92
6	.100	251.30	.092	247.85	.023	216.64	.078	251.12	.102	278.62
7	.048	326.60	.045	19.78	.021	11.32	.060	4.72	.121	11.58
8	.010	297.60	.039	47.75	.025	44.68	.038	100.21	.061	189.42
9	.037	203.06	.014	157.85	.029	123.22	.009	91.54	.041	299.48
10					.029	266.84	.025	249.68	.026	192.12

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 77 ALPHA-MCL = 2.0 POP RUN-PT 16.04
RUN 16 ALPHA-RAD = 0.5 O-COMP = .32905
POINT 1 SIGMA = .135. V-REF = 201.23
COMPUTED FREQUENCY = 9.18, K = .0717
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	19	.994	-2.287	-.631	-.693	-.631	1.112	-.546
2	15	.215	-.438	-.579	-.168	-.579	.501	-.181
3	11	.579	-.209	-.351	-.184	-.351	-.371	-.151
4	7	.320	-.040	-.041	-.372	-.041	-.371	-.409
5	3	.570	.177	.045	-.031	.045	.026	-.528
6	1	.023	-.129	-.032	.059	-.032	.026	-.058
7	1	.003	-.086	-.007	-.007	-.007	.023	-.023
8	1	.019	.190	.102	.032	.102	.016	.019
9	1	.046	.028	.032	.002	.032	.016	-.007
10	1	.012	.028	.011	.028	.011	.041	-.007

X	N	778-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	2	.995	1.285	1.081	15.760	11.441	4.603	2.900
2	3	.169	.659	-.202	-.299	-.374	1.540	1.349
3	4	.171	-.391	-.391	-.298	1.960	1.116	-.367
4	5	.371	-.045	-.391	-.478	-.227	-.333	-.387
5	6	.045	.045	-.045	-.092	-.474	-.513	-.355
6	7	.057	.057	-.057	-.082	-.360	-.033	-.039
7	8	.009	.128	-.005	-.121	-.060	-.026	-.012
8	9	.009	.128	-.012	-.037	-.008	-.024	-.013
9	10	.010	.042	-.017	.029	.025	.087	-.008
10	1						.021	.009

X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	778-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG
1	2	.957	.951	-.339	-.152	-.683	-.213
2	3	.107	.659	-.156	-.134	-.057	.540
3	4	.375	-.380	-.399	-.233	-.412	.019
4	5	.045	.045	-.045	-.478	-.350	-.419
5	6	.015	.015	-.015	-.562	-.303	-.361
6	7	.015	.015	-.015	-.054	.027	-.055
7	8	.010	.122	-.001	-.006	.044	-.054
8	9	.010	.122	-.001	-.006	.044	-.054
9	10	.002	.002	-.001	-.002	.007	.011
10	1					.005	.027

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 77 ALPHA-MCL = 2.0 PDP RUN/PT 16.04
RUN 16 ALPHA-BAR = 135.0 Q-COMP = 32905
POINT 1 SIGMA = 135.0 V-REF = 201.23
COMPUTED FREQUENCY = 9.18, K = .0717
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	19.081	186.88	0.715	184.15	5.343	181.84	3.778	176.84	2.064	165.34	3.775	162.87	3.814	158.41	3.814	158.41
2	1.488	63.85	1.603	173.84	1.591	175.27	0.835	81.82	0.853	163.77	2.207	189.65	2.207	189.65	2.207	189.65
3	1.653	197.24	1.083	191.98	1.942	190.38	2.149	191.25	1.974	189.85	2.207	189.65	2.207	189.65	2.207	189.65
4	1.302	213.13	1.450	214.23	1.498	217.33	0.551	227.93	0.520	208.87	0.544	221.54	0.531	222.48	0.531	222.48
5	0.171	175.95	0.540	175.70	0.510	176.54	0.487	175.25	0.585	177.86	0.544	177.21	0.531	176.01	0.531	176.01
6	0.129	268.57	0.220	261.68	0.209	260.50	0.238	267.46	0.254	270.59	0.242	274.34	0.244	274.19	0.244	274.19
7	0.088	102.38	0.102	85.96	0.090	86.07	0.101	86.11	0.111	87.68	0.117	92.54	0.118	92.60	0.118	92.60
8	0.196	176.35	0.152	77.80	0.131	82.64	0.135	86.51	0.141	83.00	0.128	92.87	0.145	92.67	0.145	92.67
9	0.030	112.55	0.032	93.89	0.030	69.32	0.026	90.26	0.043	86.29	0.042	101.49	0.048	98.41	0.048	98.41
10																

N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	3.258	156.78	2.986	156.59	2.103	153.44	16.095	11.68	11.748	6.033	4.883	19.58	3.189	27.48	3.189	27.48
2	2.206	190.20	2.235	191.30	2.236	189.96	2.302	183.50	2.011	192.87	2.159	188.27	2.159	188.27	2.159	188.27
3	0.510	174.92	0.525	174.54	0.519	175.70	0.504	175.05	0.376	176.39	0.537	172.44	0.528	172.52	0.528	172.52
4	0.308	280.68	0.261	280.84	0.243	274.79	0.284	273.11	0.261	276.39	0.251	282.34	0.246	273.43	0.246	273.43
5	0.128	86.07	0.107	89.82	0.120	84.48	0.115	83.77	0.070	83.43	0.067	85.95	0.094	85.03	0.094	85.03
6	0.139	93.89	0.133	93.56	0.127	93.28	0.045	34.84	0.069	61.62	0.090	74.74	0.093	71.85	0.093	71.85
7	0.042	103.46	0.043	103.08	0.044	113.34	0.032	27.83	0.033	41.95	0.025	55.61	0.028	71.85	0.028	71.85
8																
9																
10																

N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.740	33.03	1.803	46.95	1.803	128.40	0.667	101.19	0.667	133.93	0.540	162.50	0.540	162.50	0.540	162.50
2	1.619	180.56	1.600	191.86	1.600	191.86	0.433	192.09	0.433	191.86	0.433	191.86	0.433	191.86	0.433	191.86
3	1.913	170.42	1.913	170.42	1.913	170.42	0.283	227.77	0.283	225.98	0.283	225.98	0.283	225.98	0.283	225.98
4	0.450	171.83	0.450	171.83	0.450	171.83	0.571	169.82	0.571	169.82	0.571	169.82	0.571	169.82	0.571	169.82
5	0.219	80.60	0.219	80.60	0.219	80.60	0.281	280.57	0.281	280.57	0.281	280.57	0.281	280.57	0.281	280.57
6	0.103	86.37	0.103	86.37	0.103	86.37	0.149	92.19	0.149	92.19	0.149	92.19	0.149	92.19	0.149	92.19
7	0.103	86.37	0.103	86.37	0.103	86.37	0.127	86.67	0.127	86.67	0.127	86.67	0.127	86.67	0.127	86.67
8	0.029	86.37	0.029	86.37	0.029	86.37	0.040	92.67	0.040	92.67	0.040	92.67	0.040	92.67	0.040	92.67
9																
10																

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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77 ALPHA-MCL = 2.0 PDP RUN-PT 16.04
16 ALPHA-RAR = .5 Q-COMP = .32905
POINT SIGMA = 135. W-REF = 201.23
COMPUTED FREQUENCY = 9.18, A = .0717

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FOURIER COEFFICIENTS, REAL
*** BLADE PRESSURES, NORMAL

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 9.18; K =

[illegible]

X	=.774		.860		.910		N	CNREAL	CNIMAG
	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI			
1	2.843	-.636	1.699	-.373	1.648	-.889	1	6.376	-.381
2	3.334	-.246	1.112	-.316	1.183	-.818	2	-.076	-.110
3	-.061	-.057	-.065	-.009	-.070	-.032	3	-.059	-.024
4	-.006	-.057	.042	.018	-.028	.011	4	.010	.002
5	-.006	-.056	.024	.035	.040	-.030	5	-.041	.017
6	-.023	-.036	-.014	.037	-.009	.019	6	.010	.003
7	-.014	.021	-.007	-.007	.020	.012	7	-.018	-.001
8	-.016	-.011	-.007	-.009	.029	-.016	8	.009	.001
9	.008	-.001	.005	-.005	-.003	-.013	9	.009	.002
10						-.013	10	.001	-.001

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*** WALL PRESSURES, PER RADIAN ***
WALL NO.      W1      W2      W4      W6      W10
GAP FRACTION  -.125   .00F   .125   .500   1.125
CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG
*** STABILITY PARAMETER ***
* XI = -.3150 *
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MODE 1 -- OCMT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 77 ALPHA-MCL = 2.0 POP RUN-PT 16.04
RUN 16 ALPHA-BAR = 135.5 Q-COMP = 32905
POINT 1 SIGMA = 135.5 V-REF = 201.23
COMPUTED FREQUENCY = 9.16, N = .0717

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	35.146	9.09	20.223	5.39	10.105	10.27	6.768	9.66	4.234	272.776	3.06	3.06	3.06	3.06
2	15.159	20.110	13.110	20.110	10.105	10.27	6.768	9.66	4.234	272.776	3.06	3.06	3.06	3.06
3	10.105	10.27	6.768	9.66	4.234	272.776	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
4	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
5	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
6	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
7	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
8	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
9	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
10	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
2	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
3	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
4	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
5	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
6	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
7	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
8	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
9	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67
10	2.914	347.39	1.740	347.63	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67	1.673	331.67

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
2	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
3	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
4	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
5	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
6	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
7	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
8	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
9	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04
10	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04	2.199	40.04

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 --- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 79 ALPHA-PCL = 2.0 PDP RUN-PT 16.07
RUN 16 ALPHA-PAR = .5 Q-COMP = .32333
POINT 3 SIGMA = 135. V-REF = 199.44
COMPUTED FREQUENCY = 15.58, K = .1227

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	-17.439	-1.838	-7.069	-1.005	-3.620	-0.843	-1.945	-0.334	-1.787	-0.419	-1.551	-0.168	-1.809	-0.274
2	2	.754	.004	.603	.245	.546	.323	.501	.586	.526	.546	.521	.198	.828	.297
3	3	.106	-.038	.179	-.263	.188	-.263	.044	-.252	.375	-.251	.307	-.223	.274	-.197
4	4	.045	-.048	.116	-.005	.045	-.032	.177	-.142	.032	-.064	.139	-.052	.014	-.049
5	5	-.016	-.041	-.003	-.100	-.005	-.077	.008	-.071	.023	-.076	.027	-.092	.050	-.106
6	6	-.201	-.022	-.124	-.045	-.005	-.049	-.095	-.068	.089	-.062	.105	-.046	.025	-.078
7	7	.049	-.038	.039	-.076	.041	-.007	-.049	-.002	.043	-.012	.044	-.006	.077	-.054
8	8	.016	-.128	.008	-.063	.000	-.055	-.010	-.047	.008	-.051	.030	-.061	.014	-.013
9	9	-.053	-.078	-.042	-.056	-.038	-.051	-.045	-.040	-.050	-.040	-.059	-.043	.060	-.053
10	10														

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	-.898	.193	-.293	.504	.185	-.155	17.688	1.390	12.722	-.875	6.486	.598	.444	.412
2	2	.515	-.163	.231	-.174	.205	-.174	.331	-.202	.252	-.536	.227	.315	.389	.339
3	3	.014	-.072	.117	-.062	.113	-.070	-.019	-.036	.115	-.082	.037	-.049	.035	.227
4	4	.118	-.128	.117	-.141	.124	-.132	.206	-.004	.151	-.020	.154	-.049	.035	.053
5	5	-.079	-.057	-.075	-.062	-.066	-.056	.025	-.056	.020	-.016	.005	-.026	.035	.032
6	6	.015	-.019	-.032	-.018	-.030	-.047	.007	-.063	.020	-.048	.038	-.057	.037	.068
7	7	.015	-.055	-.015	-.051	-.002	-.030	-.007	-.028	.022	-.053	.020	-.031	.029	.017
8	8	-.014	-.034	-.015	-.033	-.002	-.030	-.007	-.021	.007	-.004	.027	-.023	.002	.039
9	9	-.055	-.034	-.055	-.033	-.051	-.030	-.007	-.021	.007	-.004	.027	-.023	.002	.012
10	10														

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	3.221	.195	3.092	.054	1.450	.071	1.879	-.152	1.349	-.155	1.515	-.799	.444	.412
2	2	.233	-.218	.300	-.287	.204	-.195	.188	-.225	.187	-.209	.195	-.346	.389	.339
3	3	.150	-.069	.169	-.031	.132	-.041	.119	-.106	.092	-.068	.050	-.095	.035	.227
4	4	.055	-.080	-.067	-.102	-.000	-.073	.017	-.157	.023	-.020	.176	-.047	.035	.053
5	5	-.052	-.040	-.067	-.052	-.055	-.040	-.056	-.044	.057	-.047	.061	-.043	.037	.068
6	6	-.025	-.014	-.027	-.017	-.017	-.033	.033	-.024	.031	-.021	.023	-.009	.029	.017
7	7	-.031	-.017	-.027	-.019	-.020	-.033	-.000	-.046	.022	-.004	.048	-.053	.002	.039
8	8	-.031	-.017	-.027	-.019	-.020	-.033	-.000	-.046	.022	-.004	.048	-.053	.002	.012
9	9	-.031	-.017	-.027	-.019	-.020	-.033	-.000	-.046	.022	-.004	.048	-.053	.002	.012
10	10														

MODE 1 -- OCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 79 ALPHA-MCL = 2.0 PDP RUN-PT 16.07
 RUN 16 ALPHA-RMR = 5.5 G-COMP = 32333
 POINT 3 SIGMA = 135.1 REF = 199.44
 COMPUTED FREQUENCY = 15.58, N = 1227

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	17.536	186.02	7.140	138.09	3.716	193.11	2.046	198.06	.991	208.03	1.552	180.61
2	.754	285.28	.652	122.42	.634	330.65	.771	19.49	.759	46.03	.554	19.47
3	.195	285.50	.318	304.25	.523	305.54	.255	19.88	.451	46.02	.380	328.04
4	.070	328.91	.116	2.44	.055	324.80	.179	284.81	.085	46.02	.057	328.93
5	.046	261.57	.100	268.31	.077	265.93	.172	10.12	.080	286.64	.168	34.29
6	.208	194.48	.132	199.86	.123	203.67	.116	215.50	.108	214.48	.115	203.95
7	.062	38.11	.040	8.86	.055	370.34	.048	358.22	.032	378.92	.045	358.97
8	.129	277.11	.070	276.78	.064	270.62	.060	138.16	.064	141.25	.071	140.09
9	.094	124.06	.070	127.09	.064	126.73	.060	138.16	.064	141.25	.071	140.09
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N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	.918	167.94	.293	180.05	.241	319.90	17.742	4.427	12.732	356.07	6.516	5.27
2	.691	321.68	.289	323.03	.268	319.08	.388	328.64	.584	295.14	.333	5.27
3	.174	284.41	.086	299.50	.071	289.18	.041	358.87	.302	352.92	.055	312.97
4	.074	288.98	.183	290.13	.174	292.84	.027	11.53	.185	261.92	.161	17.77
5	.040	211.13	.091	214.71	.081	215.34	.064	203.61	.036	247.01	.026	236.06
6	.057	255.03	.037	330.15	.034	332.11	.023	261.52	.033	157.42	.037	230.43
7			.068	151.13	.059	150.04	.023	261.52	.033	157.42	.037	230.43
8												
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N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	.327	15.46	3.097	1.00	1.452	2.01	1.885	355.36	1.358	353.05	1.713	32.19
2	.120	119.00	.415	45.16	.287	316.25	.293	309.91	.280	311.86	.284	317.77
3	.070	288.00	.092	284.49	.097	335.17	.107	277.60	.065	282.30	.178	287.84
4	.170	278.13	.054	31.12	.040	28.84	.157	52.92	.165	55.89	.180	52.78
5	.054	277.46	.085	259.40	.069	266.69	.071	300.15	.044	280.32	.050	281.14
6	.031	323.86	.030	310.33	.019	338.47	.041	324.03	.037	326.41	.024	317.91
7	.034	262.56	.049	260.37	.050	266.07	.045	151.67	.050	163.41	.050	162.16
8												
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ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCW PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 79 ALPHA-MCL = 2.0 PDP RUN-PT 16.07
RUN 16 ALPHA-PAR = .5 Q-LONGP = .32333
POINT 3 SIGMA = 135. V-REF = 199.44
COMPUTED FREQUENCY = 15.58, N = .1227

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NOMINAL FORCE, AND MOMENT, PER RADIAN ***

X = .012		.062		.149		.261		.392		.530		.661	
N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI
1	35.127	3.228	19.792	10.105	1.441	6.789	1.046	4.007	4.648	0.71	2.859	0.71	2.859
2	1.154	0.061	-1.173	-0.150	-0.009	-1.112	-0.247	-1.149	-0.019	0.316	0.041	0.316	0.041
3	0.225	0.173	-0.073	-0.039	-0.017	-0.188	0.025	-0.142	-0.008	-0.064	-0.070	-0.064	-0.070
4	-0.078	0.002	0.066	0.038	0.014	-0.008	0.057	-0.142	0.030	0.007	0.018	0.007	0.018
5	0.150	0.012	0.035	0.014	0.035	0.007	0.057	-0.017	0.027	0.005	-0.025	0.005	-0.025
6	0.042	0.147	0.001	0.074	-0.024	-0.020	-0.008	0.018	-0.037	-0.017	-0.029	-0.017	-0.029
7	0.226	0.004	-0.032	-0.021	-0.032	-0.011	-0.029	-0.012	0.014	0.014	0.011	0.014	0.011
8	-0.033	0.155	0.035	0.011	-0.038	0.004	-0.029	0.016	-0.023	-0.023	-0.014	-0.023	-0.014
9	0.046	-0.099	-0.035	-0.011	-0.038	0.004	-0.029	0.016	-0.023	-0.023	-0.014	-0.023	-0.014
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X = .774		.960		.910	
N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI
1	2.777	1.642	1.55	1.331	1.331
2	0.118	0.058	0.044	0.026	0.026
3	0.070	0.044	0.035	0.011	0.011
4	0.001	0.020	0.005	0.007	0.007
5	0.006	0.016	0.003	0.004	0.004
6	0.024	0.014	0.005	0.007	0.007
7	0.032	0.035	0.002	0.003	0.003
8	0.014	0.009	0.004	0.007	0.007
9	0.007	0.009	0.004	0.007	0.007
10					

*** WALL PRESSURES, PER RADIAN ***

WALL NO.		W1		W2		W4		W6		W10	
GAP FRACTION	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	0.150	0.143	0.100	0.052	-0.972	-1.035	-1.137	-0.522	6.735	-6.827
2	2	0.668	0.415	0.658	0.651	0.795	0.376	0.334	0.482	0.045	0.565
3	3	0.305	0.075	0.272	0.050	0.269	0.316	0.334	0.314	0.295	0.368
4	4	0.210	0.014	0.222	0.099	0.168	0.043	0.182	0.043	0.116	0.006
5	5	0.007	0.072	0.019	0.109	0.011	0.122	0.130	0.094	0.031	0.137
6	6	0.086	0.375	0.104	0.047	-0.156	-0.102	-0.130	-0.027	-0.069	-0.074
7	7	0.046	0.042	0.013	0.046	0.072	0.057	0.057	0.059	0.022	0.016
8	8	0.032	0.036	0.050	0.032	0.012	0.067	0.005	0.059	0.022	0.016
9	9	0.033	0.049	0.066	0.032	-0.053	0.048	0.050	0.048	0.022	0.016
10	10										

*** STABILITY PARAMETER

* XI = -.1849 *

MODE 1 -- CENTER PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 79 ALPHA-MCL = 2.0 PDP RUN-PT 16.07
RUN 16 ALPHA-BAR = 135.0 Q-COMP = 32333
POINT 13 SIGMA = 135.0 V-REF = 199.44
COMPUTED FREQUENCY = 15.58, K = .1227

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	35.275	5.25	19.792	18	10.207	6.11	6.869	8.76	4.054	2.71	4.649	8.7
2	35.275	18.74	208.221	150	193.34	226.36	271	245.62	220	227.48	317	283.21
3	35.275	32.46	284.90	64	226.36	271	245.62	220	227.48	220	227.48	263.21
4	35.275	46.18	322.87	137	226.36	271	245.62	220	227.48	220	227.48	213.77
5	35.275	59.90	360.84	210	226.36	271	245.62	220	227.48	220	227.48	131.46
6	35.275	73.62	398.81	283	226.36	271	245.62	220	227.48	220	227.48	131.46
7	35.275	87.34	436.78	356	226.36	271	245.62	220	227.48	220	227.48	131.46
8	35.275	101.06	474.75	429	226.36	271	245.62	220	227.48	220	227.48	131.46
9	35.275	114.78	512.72	502	226.36	271	245.62	220	227.48	220	227.48	131.46
10	35.275	128.50	550.69	575	226.36	271	245.62	220	227.48	220	227.48	131.46

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.798	352.93	1.649	354.62	1.478	324.18	6.777	3.17	1.521	6.98
2	2.798	228.27	1.42	245.83	1.202	178.27	1.778	191.14	1.321	216.80
3	2.798	104.81	1.19	121.78	0.976	201.27	0.20	276.89	0.014	355.03
4	2.798	269.86	0.95	216.78	0.754	326.06	0.23	288.36	0.04	169.10
5	2.798	135.41	0.73	104.81	0.532	127.83	0.11	103.43	0.05	120.01
6	2.798	1.47	0.51	1.47	0.310	37.49	0.04	103.43	0.06	169.10
7	2.798	251.47	0.29	14.03	0.08	137.49	0.04	216.67	0.07	354.25
8	2.798	127.83	0.07	37.49	0.03	245.76	0.04	216.67	0.08	243.78
9	2.798	33.11	0.02	37.49	0.01	245.76	0.03	295.83	0.09	110.77
10	2.798	309.96	0.02	301.48	0.01	245.76	0.03	295.83	0.10	292.11

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
1	4.132	1.96	4.101	4.73	7.048	188.44	1.251	404.03	9.590	314.61
2	4.132	31.81	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61
3	4.132	306.86	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61
4	4.132	334.26	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61
5	4.132	334.26	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61
6	4.132	334.26	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61
7	4.132	334.26	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61
8	4.132	334.26	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61
9	4.132	334.26	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61
10	4.132	334.26	4.926	4.73	7.048	188.44	1.251	404.03	9.590	314.61

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 81 ALPHA-MCL = 2.0 PDP RUN.PT 16.09
RUN 16 ALPHA-PAR = 5 Q-COMP = .31887
POINT 15 SIGMA = 135. V-REF = 198.04
COMPUTED FREQUENCY = 19.24, K = .1526

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	106-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	18	1.755	1.093	-8.266	-3.020	-2.157	-2.959	-2.763
2	138	1.030	1.045	-0.273	-0.267	-0.458	-0.511	-0.493
3	002	0.098	0.055	-0.017	-0.010	-0.140	-0.077	-0.056
4	006	0.008	0.017	-0.008	-0.010	-0.034	-0.018	-0.044
5	003	0.003	0.011	-0.003	-0.011	-0.059	-0.015	-0.041
6	003	0.003	0.011	-0.003	-0.011	-0.039	-0.015	-0.056
7	003	0.003	0.011	-0.003	-0.011	-0.020	-0.043	-0.001
8	003	0.003	0.011	-0.003	-0.011	-0.031	-0.006	-0.046
9	003	0.003	0.011	-0.003	-0.011	-0.031	-0.043	-0.043
10	003	0.003	0.011	-0.003	-0.011	-0.028	-0.037	-0.035
X <th>N</th> <th>774-UPPER CPREAL CPIMAG</th> <th>860-UPPER CPREAL CPIMAG</th> <th>910-UPPER CPREAL CPIMAG</th> <th>012-LOWER CPREAL CPIMAG</th> <th>062-LOWER CPREAL CPIMAG</th> <th>106-LOWER CPREAL CPIMAG</th> <th>261-LOWER CPREAL CPIMAG</th>	N	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	106-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	270	1.094	1.094	-1.197	16.346	10.791	5.238	3.535
2	422	0.028	0.028	-0.028	-0.048	-1.127	-0.636	-0.618
3	028	0.057	0.057	-0.057	-0.060	-0.127	-0.073	-0.087
4	057	0.011	0.011	-0.011	-0.034	-0.066	-0.011	-0.034
5	011	0.011	0.011	-0.011	-0.060	-0.045	-0.069	-0.055
6	025	0.013	0.013	-0.013	-0.060	-0.034	-0.047	-0.084
7	013	0.013	0.013	-0.013	-0.000	-0.033	-0.014	-0.026
8	013	0.013	0.013	-0.013	-0.016	-0.039	-0.035	-0.029
9	013	0.013	0.013	-0.013	-0.040	-0.013	-0.013	-0.010
10	013	0.013	0.013	-0.013	-0.070	-0.047	-0.023	-0.016
X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG
1	255	1.139	1.220	-1.144	3.088	3.355	0.562	0.530
2	422	0.028	0.028	-0.028	-0.048	-0.345	-0.592	-0.618
3	028	0.057	0.057	-0.057	-0.060	-0.127	-0.073	-0.087
4	057	0.011	0.011	-0.011	-0.034	-0.066	-0.011	-0.034
5	011	0.011	0.011	-0.011	-0.060	-0.045	-0.069	-0.055
6	025	0.013	0.013	-0.013	-0.060	-0.034	-0.047	-0.084
7	013	0.013	0.013	-0.013	-0.000	-0.033	-0.014	-0.026
8	013	0.013	0.013	-0.013	-0.016	-0.039	-0.035	-0.029
9	013	0.013	0.013	-0.013	-0.040	-0.013	-0.013	-0.010
10	013	0.013	0.013	-0.013	-0.070	-0.047	-0.023	-0.016

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCUT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 81 ALPHA-MCL = 2.0 PDP RUNPT 16.09
HUN 16 ALPHA-BAR = 135.0 O-COMP = 1887
POINT COMPUTED FREQUENCY = 19.24, K = .1526
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	CP-MAG	012-UPPER PHI	062-UPPER PHI	148-UPPER PHI	261-UPPER PHI	392-UPPER PHI	530-UPPER PHI	661-UPPER PHI
1	18.787	181.18	8.268	8.447	180.03	2.194	169.46	3.008
2	223	277.54	147	137	169.07	4.98	157.07	4.94
3	223	277.54	147	137	169.07	4.98	157.07	4.94
4	223	277.54	147	137	169.07	4.98	157.07	4.94
5	223	277.54	147	137	169.07	4.98	157.07	4.94
6	223	277.54	147	137	169.07	4.98	157.07	4.94
7	223	277.54	147	137	169.07	4.98	157.07	4.94
8	223	277.54	147	137	169.07	4.98	157.07	4.94
9	223	277.54	147	137	169.07	4.98	157.07	4.94
10	223	277.54	147	137	169.07	4.98	157.07	4.94

X	CP-MAG	012-UPPER PHI	062-UPPER PHI	148-UPPER PHI	261-UPPER PHI	392-UPPER PHI	530-UPPER PHI	661-UPPER PHI
1	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
2	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
3	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
4	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
5	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
6	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
7	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
8	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
9	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
10	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895

X	CP-MAG	012-UPPER PHI	062-UPPER PHI	148-UPPER PHI	261-UPPER PHI	392-UPPER PHI	530-UPPER PHI	661-UPPER PHI
1	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
2	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
3	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
4	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
5	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
6	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
7	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
8	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
9	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895
10	2.520	154.26	1.895	1.895	151.69	1.895	151.69	1.895

GCMY PERIODICITY TEST

FILE
FRONT
POINT

FOURIER COEFFICIENTS, REAL
*** BLADE PRESSURES, NORMAL

*** BLADE PRESSURES, NORMAL

X	*012		*J62	
	DELCPH	DELCPH	DELCPH	DELCPH
1	35	101	19	057
2	-	056	-	047
3	-	089	-	097
4	-	054	-	029
5	-	052	-	024
6	-	120	-	044
7	-	024	-	042
8	-	057	-	058
9	-	046	-	038
10				

X	N	DELCP ^{0.774}	DELCP ^{0.260}
1	2	0.571	1.703
2	2	0.642	0.001
3	4	0.006	0.003
4	5	0.011	0.004
5	6	0.012	0.018
6	7	0.021	0.022
8	9	0.010	0.006
9	9	0.012	0.012
10	10	0.012	0.013
		0.012	0.001

*** WALL PRESSURES, PER RAD

WALL NO.	W1
GAP FRACTION	0.125
N	CPREAL CPIMAG CP

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 81 ALPHA-MCL = 2.0 PDP RUN.PT 16.09
RUN 16 ALPHA-BAR = .5 Q-COMP = .31837
POINT S SIGMA = 135. V-REF = 198.04
COMPUTED FREQUENCY = 18.24. K = .1526
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	35.283	5.84	19.061	1.18	10.220	9.34	6.586	11.37	4.246	10.01	4.589	109.34
2	1.042	158.64	1.523	188.19	3.11	160.53	3.63	234.80	.097	187.68	.337	109.34
3	3.270	268.07	1.14	227.66	.058	113.68	.180	54.80	.197	165.73	.057	257.39
4	.654	323.73	.038	283.69	.046	293.91	.075	54.13	.147	263.43	.071	274.39
5	.047	323.73	.038	220.26	.046	166.86	.047	194.38	.024	229.10	.053	200.25
6	.156	39.65	.041	54.96	.043	49.42	.082	158.05	.010	117.58	.042	84.87
7	.094	257.92	.053	259.37	.029	296.33	.020	310.99	.040	335.44	.036	151.36
8	.126	107.21	.062	110.45	.021	122.35	.010	317.42	.015	69.63	.012	284.08
9	.114	290.04	.077	299.77	.049	315.09	.035	324.50	.031	338.92	.015	48.37
10									.025	334.45	.008	278.51

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.589	358.03	1.705	357.51	1.280	332.91	6.293	171.12	4.85	171.12	1.596	7.78
2	.052	216.75	.030	268.22	.018	276.81	.028	198.29	.008	198.29	.008	198.29
3	.007	209.69	.027	282.84	.023	305.75	.043	288.80	.011	278.59	.011	278.59
4	.024	271.99	.023	270.12	.033	357.96	.025	218.40	.003	163.52	.003	163.52
5	.024	180.31	.023	304.19	.020	118.78	.039	352.89	.006	54.21	.006	54.21
6	.021	185.39	.014	206.11	.011	203.39	.010	15.91	.003	290.75	.003	290.75
7	.010	152.82	.014	206.11	.013	111.40	.012	257.16	.004	127.09	.004	127.09
8	.012	354.76	.004	161.75	.009	161.08	.026	315.32	.007	306.70	.007	306.70
9												
10												

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG
1	2.796	31.24	2.697	29.35	8.738	179.26	2.729	163.60	8.060	108.90	1.134	183.00
2	.747	184.71	.783	176.18	.489	215.09	.581	170.36	1.134	183.00	.124	256.77
3	.153	254.18	.120	276.51	.188	298.25	.053	274.94	.124	256.77	.075	290.45
4	.207	270.51	.063	261.66	.048	263.19	.050	198.50	.156	290.93	.050	339.47
5	.086	198.48	.195	278.19	.150	293.04	.160	97.91	.079	238.25	.032	200.37
6	.191	287.46	.090	107.59	.043	147.26	.144	326.06	.064	241.93		
7	.029	68.05	.022	268.47	.063	241.31	.017	167.24				
8	.024	300.26	.105	221.32	.028	141.17						
9	.024	300.26										
10	.026	237.63										

*** STABILITY PARAMETER

W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG
1	2.796	31.24	2.697	29.35	8.738	179.26	2.729	163.60	8.060	108.90	1.134
2	.747	184.71	.783	176.18	.489	215.09	.581	170.36	1.134	183.00	.124
3	.153	254.18	.120	276.51	.188	298.25	.053	274.94	.124	256.77	.075
4	.207	270.51	.063	261.66	.048	263.19	.050	198.50	.156	290.93	.050
5	.086	198.48	.195	278.19	.150	293.04	.160	97.91	.079	238.25	.032
6	.191	287.46	.090	107.59	.043	147.26	.144	326.06	.064	241.93	
7	.029	68.05	.022	268.47	.063	241.31	.017	167.24			
8	.024	300.26	.105	221.32	.028	141.17					
9	.024	300.26									
10	.026	237.63									

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 83 ALPHA-MCL = 2.0 POP RUN.PT 17.96
RUN 17 ALPHA-PAR = 0.5 O-COMP = 32872
POINT 1 SIGMA = 180. V-PEF = 201.12
COMPUTED FREQUENCY = 9.14, K = .0714
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	19	19.471	2.195	1.427	1.137	3.368	996	929
2	18	1.779	1.156	1.037	1.190	1.110	1.110	1.110
3	17	1.779	1.156	1.037	1.190	1.110	1.110	1.110
4	16	1.779	1.156	1.037	1.190	1.110	1.110	1.110
5	15	1.779	1.156	1.037	1.190	1.110	1.110	1.110
6	14	1.779	1.156	1.037	1.190	1.110	1.110	1.110
7	13	1.779	1.156	1.037	1.190	1.110	1.110	1.110
8	12	1.779	1.156	1.037	1.190	1.110	1.110	1.110
9	11	1.779	1.156	1.037	1.190	1.110	1.110	1.110
10	10	1.779	1.156	1.037	1.190	1.110	1.110	1.110

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	19	19.471	2.195	1.427	1.137	3.368	996	929
2	18	1.779	1.156	1.037	1.190	1.110	1.110	1.110
3	17	1.779	1.156	1.037	1.190	1.110	1.110	1.110
4	16	1.779	1.156	1.037	1.190	1.110	1.110	1.110
5	15	1.779	1.156	1.037	1.190	1.110	1.110	1.110
6	14	1.779	1.156	1.037	1.190	1.110	1.110	1.110
7	13	1.779	1.156	1.037	1.190	1.110	1.110	1.110
8	12	1.779	1.156	1.037	1.190	1.110	1.110	1.110
9	11	1.779	1.156	1.037	1.190	1.110	1.110	1.110
10	10	1.779	1.156	1.037	1.190	1.110	1.110	1.110

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	19	19.471	2.195	1.427	1.137	3.368	996	929
2	18	1.779	1.156	1.037	1.190	1.110	1.110	1.110
3	17	1.779	1.156	1.037	1.190	1.110	1.110	1.110
4	16	1.779	1.156	1.037	1.190	1.110	1.110	1.110
5	15	1.779	1.156	1.037	1.190	1.110	1.110	1.110
6	14	1.779	1.156	1.037	1.190	1.110	1.110	1.110
7	13	1.779	1.156	1.037	1.190	1.110	1.110	1.110
8	12	1.779	1.156	1.037	1.190	1.110	1.110	1.110
9	11	1.779	1.156	1.037	1.190	1.110	1.110	1.110
10	10	1.779	1.156	1.037	1.190	1.110	1.110	1.110

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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FILE 83 ALPHA-MCL = 2.0 PDP RUN-PT 17.06
RUN 17 ALPHA-BAR = .5 Q-COMP = 12872
POINT 1 SIGMA = 180. N-REF = 261.12
COMPUTED FREQUENCY = 9.14, K = .0714
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED FREQUENCY

X	-012-UPPER		-062-UPPER		-108-UPPER		-261-UPPER		-392-UPPER		-530-UPPER		-661-UPPER		
	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
19	594	173.07	170.52	5.191	167.352	3.512	163.537	2.747	160.239	3.012	162.50	3.231	162.91	3.31	
1	237	221.49	176.23	1.237	175.926	1.346	175.879	1.031	155.83	1.208	150.50	1.220	149.49	1.189	
2	925	174.08	174.04	1.116	175.492	1.366	175.998	1.031	155.83	1.208	150.50	1.220	149.49	1.189	
3	280	196.08	208.14	1.683	215.020	1.741	215.984	1.476	212.503	1.533	215.335	1.592	217.403	1.659	
4	222	187.17	256.67	1.533	260.804	1.533	265.574	1.373	261.03	1.425	269.835	1.492	274.102	1.560	
7	244	356.12	356.92	1.246	360.804	1.233	365.574	1.077	358.73	1.127	369.835	1.192	374.102	1.259	
8	9	215	174.17	1.231	175.69	1.233	175.950	1.077	158.73	1.127	157.037	1.192	158.959	1.259	
9	120	184.06	230.70	1.031	235.020	1.032	235.950	0.847	230.46	0.903	238.51	0.934	239.96	1.001	
10	203	129.38	173.21	1.172	173.90	1.157	172.87	0.947	166.66	1.003	160.51	1.081	163.96	1.149	

X =	.774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.144-LOWER		.261-LOWER	
	N	CP-MAG	N	CP-MAG	N	CP-MAG	N	CP-MAG	N	CP-MAG	N	CP-MAG	N	CP-MAG
1	209	167	2	541	2	049	17	330	13	064	5	636	3	874
2	209	177	1	299	1	277	1	396	1	126	1	239	1	223
3	209	154	1	299	1	277	1	396	1	126	1	239	1	223
4	209	154	1	299	1	277	1	396	1	126	1	239	1	223
5	209	154	1	299	1	277	1	396	1	126	1	239	1	223
6	209	154	1	299	1	277	1	396	1	126	1	239	1	223
7	209	154	1	299	1	277	1	396	1	126	1	239	1	223
8	209	154	1	299	1	277	1	396	1	126	1	239	1	223
9	209	154	1	299	1	277	1	396	1	126	1	239	1	223
10	209	154	1	299	1	277	1	396	1	126	1	239	1	223

X	392-LOWER		530-LOWER		661-LOWER		774-LOWER		860-LOWER		912-LOWER	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.369	76.37	2.042	13.77	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
2	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
3	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
4	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
5	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
6	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
7	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
8	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
9	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20
10	2.369	76.37	1.295	16.47	1.332	82.42	1.323	79.26	1.397	19.18	.659	20.20

MODE 1 -- OCHI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 93 ALPHA-MCL = 2.0 POP RUN-PT 17.06
RUN 17 ALPHA-PAR = .5 O-COMP = 32872
POINT 1 SIGMA = 180. 7-REF = 201.12
COMPUTED FREQUENCY = 9.14, N = .0714

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.148		.261		.392		.530		.661	
		DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH
1	1	36.801	-2.258	21.511	-2.791	10.629	-2.251	7.102	-2.161	4.045	-0.95	5.174	-0.93	3.654	-0.72
2	2	-210	.486	-1.154	.924	-1.133	.114	-1.161	.164	-0.56	.013	-0.14	.014	-0.055	.010
3	3	.550	.028	.471	-0.62	.130	.378	.091	.034	-0.379	.056	.036	.037	.090	.085
4	4	.153	.068	.004	.049	.025	.004	.021	.050	.045	.031	.044	.011	-0.005	-0.027
5	5	-0.170	.082	-0.064	.056	-0.058	.004	-0.055	.018	-0.043	.066	-0.027	.003	-0.004	-0.024
6	6	-0.039	.061	-0.032	.048	-0.041	.007	-0.046	.026	-0.035	.037	-0.020	.003	-0.002	-0.040
7	7	-0.132	.102	-0.087	.117	-0.058	.067	-0.034	.029	.033	.032	-0.038	.020	.001	-0.058
8	8	.053	.170	.047	.080	.016	.000	.024	.010	.057	.030	.043	.011	.005	.000
9	9	.159	.342	.080	.016	.050	.000	.002	.000	.057	.030	.043	.011	.005	.000
10	10													.032	.013

X	N	.774		.850		.910		.910		.910		.910		.910	
		DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH
1	1	3.243	-1.42	2.096	-2.096	1.955	-4.32	4.32	-4.32	6.973	-2.49	6.973	-2.49	1.561	-0.116
2	2	-0.154	.328	-0.069	.069	-0.041	.036	.042	.036	-0.114	.103	-0.114	.103	-0.044	.049
3	3	.022	.008	.001	.033	.003	.020	.020	.020	.072	.019	.072	.019	.001	.001
4	4	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
5	5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
6	6	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
7	7	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
8	8	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9	9	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10	10	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

*** STABILITY PARAMETER

WALL NO.	GAP FRACTION	.125		.125		.125		.125		.125		.125		.125	
		CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG
1	1	2.763	1.078	2.394	1.222	1.955	1.470	1.561	1.408	1.125	1.125	1.125	1.125	1.125	1.125
2	2	-1.523	-0.663	-1.452	-0.784	-1.079	-0.747	-0.747	-0.747	-0.747	-0.747	-0.747	-0.747	-0.747	-0.747
3	3	-1.073	.353	-1.126	.353	-1.079	.353	-1.079	.353	-1.079	.353	-1.079	.353	-1.079	.353
4	4	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
5	5	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
6	6	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
7	7	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
8	8	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
9	9	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
10	10	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	.125		.125		.125		.125		.125		.125		.125	
		CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG
1	1	2.763	1.078	2.394	1.222	1.955	1.470	1.561	1.408	1.125	1.125	1.125	1.125	1.125	1.125
2	2	-1.523	-0.663	-1.452	-0.784	-1.079	-0.747	-0.747	-0.747	-0.747	-0.747	-0.747	-0.747	-0.747	-0.747
3	3	-1.073	.353	-1.126	.353	-1.079	.353	-1.079	.353	-1.079	.353	-1.079	.353	-1.079	.353
4	4	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
5	5	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
6	6	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
7	7	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
8	8	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
9	9	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353
10	10	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353	.517	.353

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCHI PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 83 ALPHA-MCL = 2.0 PDP RUN-PT 17.06
 RUN 17 ALPHA-BAR = .5 Q-COMP = 32872
 POINT 1 SIGMA = 100. V-REF = 201.12
 COMPUTED FREQUENCY = 9.14, K = .0714
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	36.871	356.49	21.692	352.60	10.629	358.64	7.102	346.48	4.647	344.43	3.176	342.43
2	627	210.22	1.478	216.67	.175	220.52	.404	246.48	.092	234.43	.030	230.43
3	530	113.74	.155	71.67	.143	112.71	.163	111.61	.070	122.51	.045	119.51
4	551	20.33	.475	352.47	.157	117.41	.053	56.97	.054	234.43	.012	229.41
5	195	20.33	.050	99.59	.045	56.02	.053	112.97	.054	344.43	.012	229.41
6	189	157.45	.085	138.68	.054	176.46	.053	198.40	.054	162.43	.012	229.41
7	193	237.71	.059	233.79	.042	189.66	.053	150.33	.054	162.43	.012	229.41
8	178	287.22	.105	217.52	.076	229.81	.053	148.26	.054	162.43	.012	229.41
9	174	346.00	.082	291.54	.068	283.23	.038	309.23	.064	332.42	.041	334.43
10					.051	349.40	.010	279.79				

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.349	240.51	2.096	232.34	1.36	247.52	2.002	247.52	6.978	216.54	1.565	215.74
2	3.319	240.51	.069	207.42	.071	207.42	.037	101.71	.056	175.42	.011	174.42
3	3.319	240.51	.064	207.42	.064	207.42	.020	158.55	.074	174.42	.005	174.42
4	3.319	240.51	.064	207.42	.064	207.42	.020	158.55	.074	174.42	.005	174.42
5	3.319	240.51	.064	207.42	.064	207.42	.020	158.55	.074	174.42	.005	174.42
6	3.319	240.51	.064	207.42	.064	207.42	.020	158.55	.074	174.42	.005	174.42
7	3.319	240.51	.064	207.42	.064	207.42	.020	158.55	.074	174.42	.005	174.42
8	3.319	240.51	.064	207.42	.064	207.42	.020	158.55	.074	174.42	.005	174.42
9	3.319	240.51	.064	207.42	.064	207.42	.020	158.55	.074	174.42	.005	174.42
10	3.319	240.51	.064	207.42	.064	207.42	.020	158.55	.074	174.42	.005	174.42

*** WALL PRESSURES, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.966	21.34	2.688	27.04	2.688	27.04	9.126	168.18	3.405	155.57	7.440	217.22
2	1.617	143.97	1.584	145.56	1.584	145.56	1.356	124.19	1.225	146.63	1.900	217.22
3	1.120	118.25	1.190	118.55	1.190	118.55	1.386	124.19	1.225	146.63	1.900	217.22
4	1.120	118.25	1.190	118.55	1.190	118.55	1.386	124.19	1.225	146.63	1.900	217.22
5	1.120	118.25	1.190	118.55	1.190	118.55	1.386	124.19	1.225	146.63	1.900	217.22
6	1.120	118.25	1.190	118.55	1.190	118.55	1.386	124.19	1.225	146.63	1.900	217.22
7	1.120	118.25	1.190	118.55	1.190	118.55	1.386	124.19	1.225	146.63	1.900	217.22
8	1.120	118.25	1.190	118.55	1.190	118.55	1.386	124.19	1.225	146.63	1.900	217.22
9	1.120	118.25	1.190	118.55	1.190	118.55	1.386	124.19	1.225	146.63	1.900	217.22
10	1.120	118.25	1.190	118.55	1.190	118.55	1.386	124.19	1.225	146.63	1.900	217.22

*** STABILITY PARAMETER ***

W1 = 1.125
 W2 = 1.125
 W3 = 1.125
 W4 = 1.125
 W5 = 1.125
 W6 = 1.125
 W7 = 1.125
 W8 = 1.125
 W9 = 1.125
 W10 = 1.125

MODE 1 --- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 86 ALPHA-XCL = 2.0 PDP RUN.PT 17.08
RUN 17 ALPHA-RAR = .5 Q-COMP = .33017
POINT 4 SIGMA = 180. V-REF = 201.56
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED FREQUENCY = 15.57 * K = .1213

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	-19	.099	2.539	1.259	-3.383	-2.548	-3.570	-3.630
2	-.174	.214	.614	.692	-.080	-.197	-.356	-.541
3	.158	.233	.141	.111	.022	.370	.219	.737
4	.151	.066	.095	.051	-.022	.219	.075	.188
5	.067	.042	.068	.120	.179	.209	.086	.092
6	.032	.184	.019	.002	-.074	-.086	-.066	.226
7	.099	.010	.123	.092	.095	-.086	-.088	-.050
8	.011	.010	.029	.025	.043	.022	.030	.070
9	.002	.014	.028	.008	.017	.023	.013	.019
10			.023	.040	.050	.018	.015	.005

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	-2	.954	.463	-1.742	16.659	11.587	5.397	3.593
2	.259	.729	.747	.261	-.444	-.279	-.312	-.593
3	.190	.143	.156	.219	.205	.072	.198	-.570
4	.090	.028	.015	.112	.093	.112	.106	-.302
5	.037	.018	.085	.086	.061	.109	.161	.102
6	.012	.065	.072	.095	.005	.021	.015	.197
7	.022	.012	.025	.072	.100	.086	.084	-.024
8	.035	.016	.027	.025	.091	.019	.023	.094
9	.005	.016	.077	.012	.058	.047	-.032	.015
10						.049	-.044	-.030

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	.970	1.884	.699	-.185	-.116	-.054
2	.207	.706	.678	.862	.199	.687	.156
3	.184	.099	.175	.543	.191	.687	.137
4	.129	.111	.013	.399	.077	.115	.005
5	.095	.270	.066	.001	.264	.014	.086
6	.072	.092	.140	.064	.261	.016	.017
7	.004	.092	.086	.014	.069	.005	.006
8	.077	.018	.012	.005	.025	.017	.022
9	.009	.016	.077	.011	.014	.017	.014
10				.068	.005	.081	.074

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 06 ALPHA-MCL = 2.0 PDP RUN-PT 17.08
RUN 17 ALPHA-RAR = 5 Q-COMP = 33017
POINT 14 SIGMA = 180. V-REF = 201.56
COMPUTED FREQUENCY = 15.57, K = .1213

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X =	012-UPPER	062-UPPER	148-UPPER	261-UPPER	392-UPPER	530-UPPER	661-UPPER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	267	172.43	0.477	171.46	2.561	174.34	3.549
2	274	166.47	0.477	171.46	2.561	174.34	3.549
3	274	166.47	0.477	171.46	2.561	174.34	3.549
4	274	166.47	0.477	171.46	2.561	174.34	3.549
5	274	166.47	0.477	171.46	2.561	174.34	3.549
6	274	166.47	0.477	171.46	2.561	174.34	3.549
7	274	166.47	0.477	171.46	2.561	174.34	3.549
8	274	166.47	0.477	171.46	2.561	174.34	3.549
9	274	166.47	0.477	171.46	2.561	174.34	3.549
10	274	166.47	0.477	171.46	2.561	174.34	3.549

X =	774-UPPER	860-UPPER	910-UPPER	012-LOWER	062-LOWER	148-LOWER	261-LOWER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	290	171.09	1.798	165.62	16.688	356.62	5.415
2	290	171.09	1.798	165.62	16.688	356.62	5.415
3	290	171.09	1.798	165.62	16.688	356.62	5.415
4	290	171.09	1.798	165.62	16.688	356.62	5.415
5	290	171.09	1.798	165.62	16.688	356.62	5.415
6	290	171.09	1.798	165.62	16.688	356.62	5.415
7	290	171.09	1.798	165.62	16.688	356.62	5.415
8	290	171.09	1.798	165.62	16.688	356.62	5.415
9	290	171.09	1.798	165.62	16.688	356.62	5.415
10	290	171.09	1.798	165.62	16.688	356.62	5.415

X =	392-LOWER	530-LOWER	661-LOWER	774-LOWER	860-LOWER	910-LOWER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	290	171.09	1.798	165.62	16.688	356.62
2	290	171.09	1.798	165.62	16.688	356.62
3	290	171.09	1.798	165.62	16.688	356.62
4	290	171.09	1.798	165.62	16.688	356.62
5	290	171.09	1.798	165.62	16.688	356.62
6	290	171.09	1.798	165.62	16.688	356.62
7	290	171.09	1.798	165.62	16.688	356.62
8	290	171.09	1.798	165.62	16.688	356.62
9	290	171.09	1.798	165.62	16.688	356.62
10	290	171.09	1.798	165.62	16.688	356.62

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 86 ALPHA-MCL = 2.0 POP RUN-PT 17.08
RUN 17 ALPHA-RAR = 190.5 Q-COMP = 33017
POINT 14 SIGMA = 190. V-REF = 201.56
COMPUTED FREQUENCY = 15.57, K = .1213

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	35.758	-3.524	19.969	-3.809	10.419	-1.12	6.814
2	-210	.064	-1.098	.191	-1.12	.009	3.679
3	-137	.146	-1.20	.059	.006	.072	.542
4	-990	.305	.017	.290	.046	.036	.219
5	-162	-.283	-.040	.006	.046	.036	.004
6	.058	-.092	.027	.043	.036	.036	.004
7	.058	.140	.027	.043	.036	.036	.004
8	.058	.013	.027	.043	.036	.036	.004
9	.057	.013	.027	.043	.036	.036	.004
10	.057	.013	.027	.043	.036	.036	.004

X =	.774	.850	.910
N	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	3.139	.399	1.689
2	.239	.186	.184
3	.000	.044	.005
4	.000	.030	.005
5	.000	.028	.005
6	.000	.024	.005
7	.000	.021	.005
8	.000	.011	.005
9	.000	.011	.005
10	.000	.011	.005

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	2.670	.434	1.969	3.015	7.302
2	.287	.133	.542	.285	.285
3	.175	.027	.175	.305	.213
4	.175	.027	.175	.108	.060
5	.024	.016	.129	.145	.111
6	.024	.016	.129	.124	.111
7	.024	.016	.129	.124	.111
8	.024	.016	.129	.124	.111
9	.024	.016	.129	.124	.111
10	.024	.016	.129	.124	.111

*** STABILITY PARAMETER ***

W1	W2	W4	W6	W10
1	2.670	.434	1.969	3.015
2	.287	.133	.542	.285
3	.175	.027	.175	.305
4	.175	.027	.175	.108
5	.024	.016	.129	.145
6	.024	.016	.129	.124
7	.024	.016	.129	.124
8	.024	.016	.129	.124
9	.024	.016	.129	.124
10	.024	.016	.129	.124

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 86 ALPHA-MCL = 2.0 PDP RUN-PT 17.08
RUN 17 ALPHA-BAR = .5 Q-COMP = .33017
POINT 4 SIGMA = 180. V-REF = 201.56
COMPUTED FREQUENCY = 15.57, K = .1213
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	35.923	354.37	20.329	349.220	10.424	358.17	6.817	235.46	4.319	219.78	5.50	5.077
2	277	166.64	11.15	189.86	.113	184.46	.429	135.04	.012	219.78	5.50	5.077
3	200	133.13	.134	205.99	.044	197.22	.191	337.28	.257	129.10	3.719	3.719
4	217	257.98	.291	273.32	.089	301.27	.107	4.087	.155	279.42	3.719	3.719
5	184	110.12	.074	321.87	.016	281.74	.054	58.83	.049	14.75	3.719	3.719
6	138	60.67	.051	355.16	.014	35.87	.049	90.88	.028	163.79	3.719	3.719
7	98	233.21	.034	242.83	.030	258.57	.034	222.50	.022	266.21	3.719	3.719
8	162	178.68	.074	178.68	.041	191.84	.037	212.06	.013	156.12	3.719	3.719
9	125	63.12	.062	63.12	.043	61.84	.037	91.43	.012	37.65	3.719	3.719
10												

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.164	7.24	2.136	6.76	1.713	350.23	6.747	358.56	1.333	120.83	1.505	352.96
2	217.87	90.03	.024	101.46	.184	176.22	.033	108.44	.042	293.10	.044	203.42
3	246.08	47.00	.034	58.59	.011	355.43	.042	293.10	.016	272.11	.002	182.41
4	278.21	27.14	.003	93.94	.004	387.33	.016	272.11	.007	317.79	.016	272.11
5	278.21	27.14	.003	93.94	.004	387.33	.016	272.11	.007	317.79	.007	317.79
6	278.21	27.14	.003	93.94	.004	387.33	.016	272.11	.007	317.79	.007	317.79
7	278.21	27.14	.003	93.94	.004	387.33	.016	272.11	.007	317.79	.007	317.79
8	278.21	27.14	.003	93.94	.004	387.33	.016	272.11	.007	317.79	.007	317.79
9	278.21	27.14	.003	93.94	.004	387.33	.016	272.11	.007	317.79	.007	317.79
10	278.21	27.14	.003	93.94	.004	387.33	.016	272.11	.007	317.79	.007	317.79

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
2	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
3	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
4	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
5	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
6	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
7	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
8	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
9	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38
10	1.705	9.24	2.105	116.22	1.403	9.19	9.037	169.28	3.134	163.88	7.374	351.38

*** STABILITY PARAMETER ***

SI = .1806

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 88 ALPHA-MCL = 2.0 POP RUN.PI 17.10
17 ALPHA-SAP = 18.5 G-COMP = 17.788
16 ALPHA-SIGMA = 18.5 V-REF = 200.88
COMPUTED FREQUENCY = 19.23, N = .1504

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	774-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	1	-19.006	2.484	-8.376	-.012	-.013	-.013	-.013
2	2	-.347	-.681	-.714	-.014	-.014	-.014	-.014
3	3	-.245	-.549	-.199	-.014	-.014	-.014	-.014
4	4	-.264	-.031	-.094	-.013	-.013	-.013	-.013
5	5	-.117	-.182	-.020	-.013	-.013	-.013	-.013
6	6	-.097	-.044	-.068	-.011	-.011	-.011	-.011
7	7	-.029	-.011	-.026	-.008	-.008	-.008	-.008
8	8	-.026	-.002	-.006	-.002	-.002	-.002	-.002
9	9	-.020	-.002	-.002	-.002	-.002	-.002	-.002
10	10	-.020	-.002	-.002	-.002	-.002	-.002	-.002

X	N	774-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	1	-2.987	-.130	-.376	-.012	-.012	-.012	-.012
2	2	-.525	-.386	-.453	-.014	-.014	-.014	-.014
3	3	-.134	-.449	-.173	-.013	-.013	-.013	-.013
4	4	-.079	-.173	-.032	-.013	-.013	-.013	-.013
5	5	-.055	-.079	-.037	-.011	-.011	-.011	-.011
6	6	-.041	-.041	-.008	-.008	-.008	-.008	-.008
7	7	-.010	-.009	-.002	-.002	-.002	-.002	-.002
8	8	-.002	-.002	-.002	-.002	-.002	-.002	-.002
9	9	-.002	-.002	-.002	-.002	-.002	-.002	-.002
10	10	-.002	-.002	-.002	-.002	-.002	-.002	-.002

X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG
1	1	2.042	1.546	1.546	1.546	1.546	1.546	1.546
2	2	-.081	-.125	-.125	-.125	-.125	-.125	-.125
3	3	-.033	-.042	-.042	-.042	-.042	-.042	-.042
4	4	-.023	-.015	-.015	-.015	-.015	-.015	-.015
5	5	-.024	-.009	-.009	-.009	-.009	-.009	-.009
6	6	-.017	-.005	-.005	-.005	-.005	-.005	-.005
7	7	-.011	-.002	-.002	-.002	-.002	-.002	-.002
8	8	-.007	-.001	-.001	-.001	-.001	-.001	-.001
9	9	-.007	-.001	-.001	-.001	-.001	-.001	-.001
10	10	-.007	-.001	-.001	-.001	-.001	-.001	-.001

MODE 1 -- OCUT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 88 ALPHA-MCL = 2.0 POP RUN-PT 17.10
WUN 17 ALPHA-RAR = .5 Q-COMP = 32788
POINT 16 SIGMA = 180. V-REF = 200.85
COMPUTED FREQUENCY = 19.23, K = .1504
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	Z	.012-UPPER	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER	
N		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	
1	19	.167	172.55	.420	174.17	.982	177.21	3.218	183.32
2	1	.764	287.01	.408	312.88	.562	319.19	.634	326.34
3	4	.601	245.96	.485	245.72	.462	247.56	.651	269.11
4	3	.266	351.31	.147	309.91	.147	249.40	.192	316.61
5	5	.216	237.14	.107	259.08	.095	278.93	.130	284.48
6	2	.107	224.32	.041	41.28	.094	59.76	.130	63.44
7	7	.047	193.91	.036	224.87	.037	227.75	.030	191.09
8	9	.030	344.23	.035	42.25	.044	64.23	.073	64.73
9	8	.026	5.21	.015	340.06	.047	332.79	.017	330.88
10	10	.084	256.41	.053	255.24	.039	250.67	.038	272.93

X	Z	.778-UPPER	.860-UPPER	.910-UPPER	.012-LOWER	.062-LOWER	.148-LOWER	.261-LOWER
N		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG
1	2	.966	186.39	1.697	190.87	16.407	353.28	5.497
2	1	.652	323.67	1.656	322.00	.875	286.50	.551
3	4	.469	253.35	.454	250.06	.271	279.74	.329
4	3	.190	344.77	.197	294.34	.354	236.31	.255
5	5	.064	328.77	.038	336.31	.113	54.77	.078
6	2	.089	622.50	.078	59.71	.055	84.78	.078
7	7	.013	137.18	.015	143.51	.027	73.62	.032
8	9	.047	192.43	.034	198.50	.062	122.86	.032
9	8	.025	5.80	.024	356.74	.030	129.10	.029
10	10	.036	205.50	.039	209.57	.052	141.65	.056

X	Z	.392-LOWER	.530-LOWER	.661-LOWER	.774-LOWER	.860-LOWER	.910-LOWER
N		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	.050	5.09	.593	75.20	.392	47.84
2	1	.458	321.11	.358	349.16	.611	105.56
3	4	.130	256.67	.297	249.65	.419	251.64
4	3	.077	348.07	.028	306.21	.213	300.05
5	5	.077	39.39	.028	205.12	.020	251.58
6	2	.029	48.25	.044	48.44	.079	56.58
7	7	.029	193.24	.027	152.55	.025	185.64
8	9	.020	24.99	.022	195.74	.030	175.42
9	8	.018	24.99	.019	18.97	.011	76.55
10	10	.048	204.06	.054	211.77	.044	239.32

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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88  ALPHA-MCL = 2.0      PDP RUN.PT 17.10
17  ALPHA-PAR = .5      O-COMP = 32788
6   SIGMA = 180.        V-PEF      = 200.85
   COMPUTED FREQUENCY= 19.23.      K = .1504
FILE RUN POINT

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FOURIER COEFFICIENTS, REAL & IMAGINARY
 *** BLADE PRESSURES, NORMAL FORCE, AND
 FREQUENCY = 19.23, PER RADIAN ***

X =	°012		°062		°148		°261		°392		°530		°661	
	N	DELCP	N	DELCP	N	DELCP	N	DELCP	N	DELCP	N	DELCP	N	DELCP
1	35	797	4	463	19	676	4	422	10	470	17	417	6	879
2	-	098	-	458	-	071	-	029	-	063	-	048	-	262
3	-	291	-	482	-	071	-	048	-	101	-	048	-	338
4	-	460	-	474	-	074	-	181	-	104	-	116	-	076
5	-	183	-	474	-	105	-	150	-	120	-	120	-	115
6	-	092	-	071	-	107	-	048	-	052	-	052	-	048
7	-	053	-	071	-	099	-	048	-	024	-	024	-	039
8	-	063	-	040	-	033	-	017	-	039	-	039	-	022
9	-	021	-	014	-	018	-	052	-	001	-	016	-	035
10	-	021	-	014	-	031	-	052	-	045	-	046	-	019
11	-	021	-	014	-	031	-	052	-	045	-	046	-	019
12	-	021	-	014	-	031	-	052	-	045	-	046	-	019
13	-	021	-	014	-	031	-	052	-	045	-	046	-	019
14	-	021	-	014	-	031	-	052	-	045	-	046	-	019
15	-	021	-	014	-	031	-	052	-	045	-	046	-	019
16	-	021	-	014	-	031	-	052	-	045	-	046	-	019
17	-	021	-	014	-	031	-	052	-	045	-	046	-	019
18	-	021	-	014	-	031	-	052	-	045	-	046	-	019
19	-	021	-	014	-	031	-	052	-	045	-	046	-	019
20	-	021	-	014	-	031	-	052	-	045	-	046	-	019
21	-	021	-	014	-	031	-	052	-	045	-	046	-	019
22	-	021	-	014	-	031	-	052	-	045	-	046	-	019
23	-	021	-	014	-	031	-	052	-	045	-	046	-	019
24	-	021	-	014	-	031	-	052	-	045	-	046	-	019
25	-	021	-	014	-	031	-	052	-	045	-	046	-	019
26	-	021	-	014	-	031	-	052	-	045	-	046	-	019
27	-	021	-	014	-	031	-	052	-	045	-	046	-	019
28	-	021	-	014	-	031	-	052	-	045	-	046	-	019
29	-	021	-	014	-	031	-	052	-	045	-	046	-	019
30	-	021	-	014	-	031	-	052	-	045	-	046	-	019
31	-	021	-	014	-	031	-	052	-	045	-	046	-	019
32	-	021	-	014	-	031	-	052	-	045	-	046	-	019
33	-	021	-	014	-	031	-	052	-	045	-	046	-	019
34	-	021	-	014	-	031	-	052	-	045	-	046	-	019
35	-	021	-	014	-	031	-	052	-	045	-	046	-	019
36	-	021	-	014	-	031	-	052	-	045	-	046	-	019
37	-	021	-	014	-	031	-	052	-	045	-	046	-	019
38	-	021	-	014	-	031	-	052	-	045	-	046	-	019
39	-	021	-	014	-	031	-	052	-	045	-	046	-	019
40	-	021	-	014	-	031	-	052	-	045	-	046	-	019

X =	77°		86°		91°		N	CNREAL	CNIMAG	N	CMREAL	CMIMAG
	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH						
1	3.211	.621	2.167	.490	1.675	-.168	1	6.752	-.095	1	1.495	-.235
2	.264	-.166	-.118	-.072	-.092	.114	2	-.050	.014	2	-.036	-.019
3	-.028	.041	-.065	.056	-.038	-.010	3	-.013	.079	3	-.016	-.007
4	-.053	-.028	-.054	-.042	-.027	-.010	4	-.028	-.073	4	-.009	-.016
5	.019	.018	-.037	-.044	-.005	.032	5	-.001	-.008	5	-.003	-.000
6	-.026	.048	-.016	-.017	-.013	-.002	6	-.019	-.022	6	-.006	-.006
7	.075	-.025	-.022	-.012	-.015	.002	7	-.003	-.006	7	-.001	-.003
8	-.014	.021	-.024	-.031	-.015	-.001	8	-.028	.015	8	-.002	-.007
9	.000	-.021	.014	-.023	-.013	-.017	9	-.003	-.009	9	-.006	-.003
10							10	-.028	.009	10	-.006	-.007

*** STABILITY PARAMETER

WALL NO.	W1	W2	W4	W6	W10	* XI =	* .2351 *
GAP FRACTION	-.125	.000	.125	.500	1.125		
	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG		

*** WALL PRESSURE, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	-.125	.000	.125	.500	1.125
	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 88 ALPHA-MCL = 2.0 POP RUN-PT 17.10
 RUN 17 ALPHA-BAR = .5 Q-COMP = 327A8
 POINT 6 SIGMA = 160. V-REF = 200.85
 16 COMPUTED FREQUENCY = 19.23, K = .1504

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.168	.261	.392	.530	.661							
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI						
1	36.074	352.89	20.118	347.30	10.478	357.72	6.884	2.06	4.676	9.04	5.192	6.59	3.858	12.40
2	.186	218.07	.079	211.70	.079	211.19	.428	232.19	.197	159.43	.259	51.98	.187	48.12
3	.405	44.15	.085	34.23	.147	46.41	.146	342.02	.311	103.45	.022	10.79	.132	78.03
4	.530	299.78	.304	214.68	.137	232.39	.119	328.22	.179	101.48	.038	297.05	.039	133.38
5	.329	296.13	.259	211.47	.121	252.35	.119	328.22	.091	111.83	.038	139.91	.039	133.38
6	.091	171.15	.045	185.11	.021	256.67	.021	71.79	.058	263.58	.016	78.18	.019	182.30
7	.065	35.05	.048	179.76	.052	82.36	.051	107.53	.023	234.25	.046	121.67	.023	168.48
8	.087	136.15	.037	153.05	.053	207.75	.048	215.64	.056	234.77	.048	244.33	.028	268.92
9	.012	90.21	.023	139.21	.028	207.75	.041	88.45	.016	86.46	.023	103.45	.009	132.74
10	.116	108.44	.061	120.55	.067	141.65	.065	178.05	.049	157.69	.047	172.66	.017	223.58

X =	.774	.860	.910							
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI		
1	3.379	19.95	2.234	12.74	1.683	354.28	6.751	359.19	1.501	351.80
2	.046	127.78	.056	96.17	.022	148.68	.093	57.36	.018	213.51
3	.045	125.59	.016	17.17	.019	145.92	.040	260.86	.028	185.64
4	.049	152.57	.054	181.69	.027	177.92	.078	111.05	.004	185.64
5	.027	318.42	.008	326.54	.005	269.36	.048	263.43	.006	182.45
6	.027	162.70	.024	224.37	.014	209.43	.029	229.36	.006	172.72
7	.025	281.71	.020	322.31	.013	351.99	.029	229.36	.004	150.17
8	.014	169.77	.022	302.63	.015	182.01	.016	162.84	.009	131.01
9	.021	271.16								
10										

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
			.125		.125		.125		.125		.125		.125	
1	2.717	353.19	2.751	354.24	8.661	172.93	2.931	177.35	7.732	349.70	1.125	7.732	349.70	
2	.671	315.22	.506	357.39	1.295	301.47	.538	257.18	.404	295.12		.404	295.12	
3	.498	248.74	.371	245.29	.610	268.84	.183	278.42	.285	268.84		.285	268.84	
4	.237	253.14	.352	251.91	.188	309.23	.061	292.65	.160	281.24		.160	281.24	
5	.021	323.46	.056	172.16	.135	268.36	.105	292.65	.098	279.59		.098	279.59	
6	.111	38.80	.151	39.94	.135	53.06	.105	44.70	.057	260.98		.057	260.98	
7	.032	209.00	.017	147.20	.076	228.21	.016	218.90	.021	347.07		.021	347.07	
8	.053	299.27	.011	161.20	.078	249.58	.016	88.25	.067	347.07		.067	347.07	
9	.010	44.16	.042	53.63	.033	353.58	.035	225.73	.046	226.70		.046	226.70	
10	.049	206.97	.054	164.07	.071	238.43								

TABLE 5

MODE 1 DATA FOR $\alpha_{MCL} = 2 \text{ deg}$, $\bar{\alpha} = 2 \text{ deg}$

$\sigma \text{ (deg)}$	k	page
-135	.0717	116
"	.1225	120
"	.1519	124
-90	.0722	128
"	.1218	132
"	.1504	136
-45	.0707	140
"	.1214	144
"	.1508	148
0	.0724	152
"	.1228	156
"	.1491	160
45	.0724	164
"	.1223	168
"	.1506	172
90	.0721	176
"	.1222	180
"	.1499	184
135	.0716	188
"	.1224	192
"	.1516	196
180	.0724	200
"	.1217	204
"	.1498	208

RECORDING PAGE BLANK NOT FILMED

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 --- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 32 ALPHA-MCL = 2.0 PDP RUN.PT 8.03
RUN 8 ALPHA-BAR = 2.0 Q-COMP = .32236
POINT 1 SIGMA = -135. V-REF = 199.10
1 COMPUTED FREQUENCY = 9.09, K = .0717

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	24	343	6.120	1.017	3.033	-2.813	-2.948	-2.971
2	2	861	-4.266	1.018	4.08	4.37	5.17	5.11
3	2	665	-5.18	1.008	2.57	2.84	5.17	5.11
4	3	333	-3.33	1.01	1.43	1.13	2.80	3.30
5	3	629	-3.33	1.01	1.43	1.13	2.80	3.30
6	3	198	-3.33	1.01	1.43	1.13	2.80	3.30
7	3	643	-3.33	1.01	1.43	1.13	2.80	3.30
8	3	301	-3.33	1.01	1.43	1.13	2.80	3.30
9	3	182	-3.33	1.01	1.43	1.13	2.80	3.30
10	3	040	-3.33	1.01	1.43	1.13	2.80	3.30

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	24	383	-1.764	1.587	15.835	-3.798	5.022	3.401
2	2	475	-1.199	1.587	15.835	-3.798	5.022	3.401
3	2	112	-1.199	1.587	15.835	-3.798	5.022	3.401
4	2	031	-1.199	1.587	15.835	-3.798	5.022	3.401
5	2	084	-1.199	1.587	15.835	-3.798	5.022	3.401
6	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
7	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
8	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
9	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
10	2	005	-1.199	1.587	15.835	-3.798	5.022	3.401

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	24	383	-1.764	1.587	15.835	-3.798	5.022	3.401
2	2	475	-1.199	1.587	15.835	-3.798	5.022	3.401
3	2	112	-1.199	1.587	15.835	-3.798	5.022	3.401
4	2	031	-1.199	1.587	15.835	-3.798	5.022	3.401
5	2	084	-1.199	1.587	15.835	-3.798	5.022	3.401
6	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
7	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
8	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
9	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
10	2	005	-1.199	1.587	15.835	-3.798	5.022	3.401

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	24	383	-1.764	1.587	15.835	-3.798	5.022	3.401
2	2	475	-1.199	1.587	15.835	-3.798	5.022	3.401
3	2	112	-1.199	1.587	15.835	-3.798	5.022	3.401
4	2	031	-1.199	1.587	15.835	-3.798	5.022	3.401
5	2	084	-1.199	1.587	15.835	-3.798	5.022	3.401
6	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
7	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
8	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
9	2	022	-1.199	1.587	15.835	-3.798	5.022	3.401
10	2	005	-1.199	1.587	15.835	-3.798	5.022	3.401

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 32 ALPHA-MCL = 2.0 POP RUMPT 8.03
RUN 6 ALPHA-PA = 12.0 Q-COMP = 32236
POINT 1 SIGMA = -135.0 V-REF = 199.10
COMPUTED FREQUENCY = 9.09. M = .0717

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X =	.012-UPPER	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.510-UPPER	.661-UPPER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	25.100	165.89	7.396	172.10	3.005	209.06	3.539
2	5.137	236.16	.379	182.69	.438	174.37	.543
3	.843	322.09	.165	357.08	.321	316.07	.340
4	.712	207.88	.145	339.55	.133	349.42	.123
5	.695	286.59	.072	27.81	.046	329.79	.025
6	.104	65.92	.093	21.59	.082	235.50	.101
7	.474	230.65	.057	13.73	.042	131.08	.052
8	.230	122.11	.035	79.99	.025	97.20	.037
9	.192	197.79	.010	355.54	.029	55.98	.014
10	.253	279.08	.004	137.57	.007	212.15	.010
						38.94	

X =	.774-UPPER	.860-UPPER	.910-UPPER	.012-LOWER	.062-LOWER	.148-LOWER	.261-LOWER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	2.965	216.57	1.942	225.16	9.636	336.79	5.398
2	.515	157.27	.309	160.93	1.330	182.76	.494
3	.120	338.45	.111	340.22	.979	288.55	.345
4	.033	314.12	.036	311.61	.201	104.59	.099
5	.098	77.55	.085	335.68	.236	206.55	.044
6	.058	97.34	.055	84.47	.096	95.10	.094
7	.031	45.46	.034	84.47	.097	112.29	.057
8	.014	208.82	.021	258.09	.050	32.29	.040
9	.007	50.89	.005	89.60	.035	154.24	.028
10							

X =	.392-LOWER	.530-LOWER	.661-LOWER	.774-LOWER	.860-LOWER	.910-LOWER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	2.210	335.26	1.045	325.56	.721	305.99
2	.523	151.43	.336	156.87	.685	171.91
3	.123	326.08	.197	3.06	.264	146.20
4	.043	324.09	.071	329.15	.102	10.32
5	.086	59.71	.071	359.76	.089	10.33
6	.043	44.36	.048	64.48	.054	75.34
7	.032	207.13	.011	26.74	.052	45.64
8	.015	98.26	.020	211.17	.017	243.05
9	.006		.029	141.11	.014	237.93
10						

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32 ALPHA-WCL = 2.0      PDP RUN.PT 8.03
8 ALPHA-BAR = 2.0      O-COMP = .32236
1 ALPHA-REF = 135.      V-REF = 199.1C
COMPUTED FREQUENCY = 9.09, K = .0717

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FOURIER COEFFICIENTS, REAL & IMAGINARY
COMPUTED

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

[illegible]

X = .774		R6C		910		N		CNREAL		CNIMAG		N		CHREAL		CHIMAG	
DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1.375	1.112	2.212	1.403	1.625	1.862	1	5.419	1.402	-	1.519	1	1.234	1.402	-	1.519	1	1.519
2.975	1.112	2.212	1.403	1.625	1.862	2	5.419	1.402	-	1.519	2	1.234	1.402	-	1.519	2	1.519
3.975	1.112	2.212	1.403	1.625	1.862	3	5.419	1.402	-	1.519	3	1.234	1.402	-	1.519	3	1.519
4.975	1.112	2.212	1.403	1.625	1.862	4	5.419	1.402	-	1.519	4	1.234	1.402	-	1.519	4	1.519
5.975	1.112	2.212	1.403	1.625	1.862	5	5.419	1.402	-	1.519	5	1.234	1.402	-	1.519	5	1.519
6.975	1.112	2.212	1.403	1.625	1.862	6	5.419	1.402	-	1.519	6	1.234	1.402	-	1.519	6	1.519
7.975	1.112	2.212	1.403	1.625	1.862	7	5.419	1.402	-	1.519	7	1.234	1.402	-	1.519	7	1.519
8.975	1.112	2.212	1.403	1.625	1.862	8	5.419	1.402	-	1.519	8	1.234	1.402	-	1.519	8	1.519
9.975	1.112	2.212	1.403	1.625	1.862	9	5.419	1.402	-	1.519	9	1.234	1.402	-	1.519	9	1.519
10.975	1.112	2.212	1.403	1.625	1.862	10	5.419	1.402	-	1.519	10	1.234	1.402	-	1.519	10	1.519

*** STABILITY PARAMETER

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	-.125	.000	.125	.500	1.125
	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
	*****	*****	*****	*****	*****
	* XI =				.5194
	*				*

*** WALL PRESSURE, PER RADIAN ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- JCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 32 ALPHA-MCL = 2.0 PUP RUN-PT 8.03
RUN 8 ALPHA-BAR = 2.0 Q-COMP = 32216
POINT 1 STIMA = -135 V-REF = 199.10
COMPUTED FREQUENCY = 9.09, K = .0717

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	.012 PHI	DELCPM	.062 PHI	DELCPM	.148 PHI	DELCPM	.261 PHI	DELCPM	.392 PHI	DELCPM	.530 PHI	DELCPM	.661 PHI
1	41.761	344.17	16.823	343.43	9.469	348.36	6.491	352.42	4.422	1.57	4.748	9.39	0.058	19.17
2	1.152	64.91	.950	192.79	.164	115.75	.193	388.61	.181	68.84	.153	79.41	.111	154.95
3	.649	121.34	.637	274.59	.085	321.50	.050	345.92	.010	115.71	.062	309.28	.073	122.01
4	.788	132.42	.308	127.23	.125	193.30	.064	213.13	.034	156.09	.089	341.74	.054	251.01
5	.652	112.29	.284	206.79	.056	197.57	.007	284.61	.031	118.05	.015	265.44	.028	251.93
6	.623	119.90	.165	123.20	.016	142.99	.051	137.05	.054	118.52	.017	299.11	.029	252.75
7	.224	136.97	.055	129.67	.016	140.45	.031	105.11	.006	39.99	.027	298.34	.015	169.67
8	.161	126.78	.045	133.72	.033	119.45	.013	177.80	.018	327.64	.021	202.15	.029	151.59
10	.109	98.68	.039	127.41	.026	90.35	.027	177.80	.008	22.96	.021	202.15	.019	151.59

N	DELCPM	.774 PHI	DELCPM	.860 PHI	DELCPM	.910 PHI	N	CM-MAG	PHIN	N	CM-MAG	PHIN
1	3.176	20.50	2.434	213.34	1.839	272.95	1	6.435	355.99	1	1.095	339.67
2	.131	238.00	.059	132.49	.064	184.37	2	.132	109.07	2	.064	284.32
3	.029	199.88	.013	193.57	.019	31.08	3	.002	141.61	3	.009	168.60
4	.051	139.21	.040	51.57	.033	81.86	4	.029	107.65	4	.009	197.34
5	.046	125.94	.016	145.16	.009	218.04	5	.049	129.78	5	.011	57.54
6	.027	359.66	.022	144.34	.009	288.61	6	.039	65.56	6	.004	114.59
7	.037	45.33	.021	25.50	.006	340.59	7	.007	130.47	7	.007	85.50
8	.009	275.10	.003	271.87	.009	14.79	8	.017	189.66	8	.007	85.50
10	.009	220.49	.008	334.84	.009	14.79	10	.017	189.66	10	.007	85.50

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	M1	M2	M4	M6	M10	STABILITY PARAMETER
1	3.172	323.96	2.707	322.29	2.478	197.79	35.13
2	.403	346.64	.928	117.37	.587	176.14	350.67
3	.191	324.72	.546	331.65	.400	342.06	350.51
4	.055	351.72	.150	332.21	.067	316.00	350.51
5	.109	46.24	.086	347.36	.084	16.46	350.51
6	.061	97.37	.112	42.13	.084	16.46	350.51
7	.058	46.55	.085	52.33	.069	71.64	350.51
8	.012	158.94	.051	190.44	.021	58.09	350.51
10	.016	107.06	.054	192.39	.013	117.01	350.51

*** STABILITY PARAMETER ***

W1 = 1.125
W2 = .000
W4 = .125
W6 = .500
W10 = 1.125

PHI = 350.51
CP-MAG = 7.604
CP-MAG = 1.444
CP-MAG = .254
CP-MAG = .094
CP-MAG = .122
CP-MAG = .096
CP-MAG = .042

MODE 1 -- OCW? PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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34  ALPHA-MCL = 2.0  POP RUNPT 8.06
8  ALPHA-FAR = 2.0  Q-COMP = .32268
3  SIGMA = .75  V-PEP = 199.19
COMPUTED FREQUENCY = 15.53, K = .1225
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED

	X = .012-UPPER		X = .062-UPPER		X = .148-UPPER		X = .261-UPPER		X = .392-UPPER		X = .530-UPPER		X = .661-UPPER	
	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	-2.131	7.237	-7.368	1.624	-4.379	.573	-3.177	-.034	-2.983	-.540	-3.181	-1.113	-3.116	-1.312
2	-2.897	-3.515	-1.031	-.024	-.106	.005	-.097	-.010	-.093	-.053	-.155	-.031	-.042	-.076
3	-2.404	-.519	-.041	-.012	-.005	-.006	-.002	-.117	-.047	-.144	-.178	-.027	-.092	-.025
4	-.761	-.209	-.061	-.009	-.075	-.006	-.057	-.001	-.025	-.008	-.024	-.046	-.034	-.016
5	-.110	-.061	-.029	-.016	-.026	-.009	-.033	-.028	-.063	-.008	-.019	-.012	-.022	-.034
6	-.094	-.042	-.001	-.050	-.039	-.063	-.028	-.058	-.001	-.030	-.013	-.020	-.002	-.014
7	-.214	-.482	-.062	-.118	-.059	-.001	-.031	-.019	-.001	-.019	-.037	-.008	-.053	-.001
8	-.248	-.137	-.047	-.072	-.038	-.027	-.023	-.027	-.020	-.047	-.024	-.009	-.014	-.003
9	-.052	-.300	-.048	-.067	-.038	-.010	-.017	-.011	-.029	-.043	-.031	-.031	-.029	-.044
10					-.139		.010		.029		.037		.025	

X	M	= .774-UPPER CPREAL CPI MAG	.860-UPPER CPREAL CPI MAG	.910-UPPER CPREAL CPI MAG	.012-LOWER CPREAL CPI MAG	.062-LOWER CPREAL CPI MAG	.148-LOWER CPREAL CPI MAG	.261-LOWER CPREAL CPI MAG
1	2	-.524	-1.178	-1.516	15.595	8.328	4.980	3.244
2	3	-.070	-.095	-1.232	-1.285	-.798	-.072	-.020
3	4	-.063	-.096	-.089	-1.767	-.739	-.078	-.149
4	5	-.001	-.058	-.029	-.006	-.239	-.037	-.004
5	6	-.024	-.038	-.023	.046	-.079	-.025	.010
6	7	-.031	-.024	-.014	.026	-.101	-.061	.004
7	8	-.034	-.026	-.022	.030	-.122	.078	.002
8	9	-.040	-.045	-.045	.010	-.115	.076	.003
9	10	-.017	-.018	-.038	.026	-.020	.017	.003
10		-.029	-.027	-.028	-.020	-.007	.015	.003
		-.042	-.051	-.043	-.087	-.035	-.034	-.010
			-.027	-.043	-.087	-.035	-.034	-.010

X =	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG
1	1.845	1.470	1.687	1.85	1.56	1.23
2	1.009	1.040	1.013	1.001	1.045	1.255
3	1.018	1.031	1.014	1.019	1.051	1.116
4	1.035	1.047	1.054	1.058	1.085	1.071
5	1.002	1.034	1.034	1.047	1.045	1.001
6	1.012	1.040	1.045	1.051	1.058	1.017
7	1.017	1.045	1.047	1.057	1.061	1.008
8	1.017	1.045	1.047	1.057	1.061	1.008
9	1.017	1.045	1.047	1.057	1.061	1.008
10	1.017	1.045	1.047	1.057	1.061	1.008

ORIGINAL OF POOR QUALITY.

MODE 1 -- OCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 34 ALPHA-MCL = 2.0 POP RUN-PT 8.06
RUN 8 ALPHA-BAR = 2.0 Q-COMP = 32268
POINT 3 SIGMA = 135. V-REF = 199.19
COMPUTED FREQUENCY = 15.53, K = .1225
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	193	163.31	7.568	167.47	4.416	172.55	3.178	180.62	3.031	190.26	3.370	199.28
2	4	757	212.64	106	167.00	106	177.52	.097	185.90	.109	199.27	.117	208.02
3	4	655	308.11	106	195.78	100	273.10	.117	269.06	.151	252.02	.052	228.88
4	7	709	195.34	062	351.90	075	274.30	.053	320.43	.025	349.49	.024	348.68
5	6	106	261.94	033	154.03	027	199.21	.043	220.43	.063	186.92	.038	148.38
6	7	105	206.77	050	268.52	071	297.21	.065	295.76	.030	263.60	.038	348.23
7	8	527	246.11	064	343.87	059	359.23	.036	329.14	.019	273.18	.046	19.37
8	9	281	331.68	064	357.98	066	323.90	.035	310.85	.053	66.71	.044	45.45
9	8	058	219.37	060	17.37	062	19.79	.043	28.49	.038	40.17	.045	34.53
10	305	279.91		049	7.69	040	13.87	.020	34.16	.038	40.17		

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	785	205.03	2.168	206.91	1.690	206.01	16.343	342.96	8.963	338.31	5.031	345.93
2	3	115	239.74	113	238.77	109	235.18	.137	182.38	.498	181.69	.104	224.21
3	4	031	140.22	033	135.41	029	135.68	.084	156.50	.258	242.07	.196	276.00
4	5	031	140.22	033	135.41	029	135.68	.084	156.50	.258	242.07	.196	276.00
5	6	031	140.22	033	135.41	029	135.68	.084	156.50	.258	242.07	.196	276.00
6	7	031	140.22	033	135.41	029	135.68	.084	156.50	.258	242.07	.196	276.00
7	8	031	140.22	033	135.41	029	135.68	.084	156.50	.258	242.07	.196	276.00
8	9	031	140.22	033	135.41	029	135.68	.084	156.50	.258	242.07	.196	276.00
9	10	031	140.22	033	135.41	029	135.68	.084	156.50	.258	242.07	.196	276.00

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	059	352.78	1.479	359.24	711	15.09	.411	22.31	.377	225.75	.123	358.85
2	3	102	259.56	1.058	252.77	033	305.94	.150	197.66	.167	207.06	.240	155.51
3	4	005	358.99	1.048	350.32	036	318.21	.033	264.73	.111	257.17	.095	228.40
4	5	008	106.34	023	373.97	055	316.28	.035	32.03	.074	110.87	.024	356.67
5	6	016	306.16	023	337.78	049	252.57	.046	36.03	.012	152.06	.019	69.61
6	7	041	306.27	052	287.09	022	296.91	.046	314.70	.013	20.36	.039	296.16
7	8	043	67.04	072	68.95	022	97.93	.063	49.19	.020	341.78	.034	221.80
8	9	022	21.19	029	6.59	032	26.46	.045	359.63	.040	60.57	.037	58.11
9	10	020	112.89	026	106.62	035	88.39	.021	61.30	.024	13.13	.023	66.37

X	.012		.062		.148		.261		.392		.530		.661							
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP						
1	39	726	-12	124	15	716	-4	354	9	260	-1	796	6	421	1	827	3	802	1	497
2	1	601	1	014	-	697	-	025	9	333	-	075	6	103	-	087	0	078	-	075
3	1	341	1	509	-	197	-	025	9	333	-	075	6	103	-	087	0	055	-	062
4	1	031	1	278	-	014	-	254	-	115	-	066	-	047	-	030	0	030	-	055
5	1	733	1	724	-	014	-	254	-	115	-	066	-	047	-	030	0	056	-	055
6	1	234	1	113	-	076	-	087	-	023	-	081	-	027	-	060	0	033	-	053
7	1	277	1	158	-	076	-	066	-	023	-	081	-	027	-	060	0	034	-	038
8	1	072	1	071	-	055	-	029	-	043	-	044	-	018	-	020	0	021	-	057
9	1	072	1	387	-	055	-	029	-	043	-	044	-	018	-	020	0	028	-	001
10	1	072	1	387	-	055	-	029	-	043	-	044	-	018	-	020	0	028	-	001

X	.77 ^u		.60		.910		N	CNREAL	CNIMAG	N	CHREAL	CHIMAG
	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH	DELCPH						
1	2.9074	-.334	1.677	-.711	1.638	-.745	1	6.329	-.356	1	1.392	-.522
2	-.058	-.145	-.034	-.512	-.127	-.056	2	-.033	-.044	2	-.017	-.034
3	-.056	-.023	-.043	-.048	-.005	-.004	3	-.008	-.013	3	-.004	-.012
4	-.029	-.006	-.024	-.028	-.029	-.018	4	-.015	-.002	4	-.001	-.008
5	-.027	-.029	-.022	-.020	-.018	-.018	5	-.009	-.001	5	-.004	-.004
6	-.026	-.015	-.017	-.024	-.002	-.024	6	-.013	-.044	6	-.002	-.001
7	-.019	-.024	-.021	-.028	-.019	-.023	7	-.033	-.01	7	-.003	-.01
10							10			10		

*** STABILITY PARAMETER

WALL NO.	W1	W2	W4	W6	W10	XI =
GAP FRACTION	-.125	.000	.125	.500	1.125	.5218
	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	

WALL NO.	GAP	Fraction	N	W1 - .125 CPREAL	W2 000 CPREAL	W3 000 CPREAL	W4 000 CPREAL	W5 000 CPREAL	W6 000 CPREAL	W7 000 CPREAL	W8 000 CPREAL	W9 000 CPREAL	W10 000 CPREAL	W11 000 CPREAL	W12 000 CPREAL	W13 000 CPREAL	W14 000 CPREAL	W15 000 CPREAL	W16 000 CPREAL	W17 000 CPREAL	W18 000 CPREAL	W19 000 CPREAL	W20 000 CPREAL	W21 000 CPREAL	W22 000 CPREAL	W23 000 CPREAL	W24 000 CPREAL	W25 000 CPREAL	W26 000 CPREAL	W27 000 CPREAL	W28 000 CPREAL	W29 000 CPREAL	W30 000 CPREAL	W31 000 CPREAL	W32 000 CPREAL	W33 000 CPREAL	W34 000 CPREAL	W35 000 CPREAL	W36 000 CPREAL	W37 000 CPREAL	W38 000 CPREAL	W39 000 CPREAL	W40 000 CPREAL	W41 000 CPREAL	W42 000 CPREAL	W43 000 CPREAL	W44 000 CPREAL	W45 000 CPREAL	W46 000 CPREAL	W47 000 CPREAL	W48 000 CPREAL	W49 000 CPREAL	W50 000 CPREAL	W51 000 CPREAL	W52 000 CPREAL	W53 000 CPREAL	W54 000 CPREAL	W55 000 CPREAL	W56 000 CPREAL	W57 000 CPREAL	W58 000 CPREAL	W59 000 CPREAL	W60 000 CPREAL	W61 000 CPREAL	W62 000 CPREAL	W63 000 CPREAL	W64 000 CPREAL	W65 000 CPREAL	W66 000 CPREAL	W67 000 CPREAL	W68 000 CPREAL	W69 000 CPREAL	W70 000 CPREAL	W71 000 CPREAL	W72 000 CPREAL	W73 000 CPREAL	W74 000 CPREAL	W75 000 CPREAL	W76 000 CPREAL	W77 000 CPREAL	W78 000 CPREAL	W79 000 CPREAL	W80 000 CPREAL	W81 000 CPREAL	W82 000 CPREAL	W83 000 CPREAL	W84 000 CPREAL	W85 000 CPREAL	W86 000 CPREAL	W87 000 CPREAL	W88 000 CPREAL	W89 000 CPREAL	W90 000 CPREAL	W91 000 CPREAL	W92 000 CPREAL	W93 000 CPREAL	W94 000 CPREAL	W95 000 CPREAL	W96 000 CPREAL	W97 000 CPREAL	W98 000 CPREAL	W99 000 CPREAL	W100 000 CPREAL
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100				

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 34 ALPHA-MCL = 2.0 POP RUN-PT 8.06
RUN 8 ALPHA-BAR = 135.0 O-COMP = 32268
POINT 3 SIGMA = 135.0 V-REF = 196.19
COMPUTED FREQUENCY = 15.53, K = .1225
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	41.535	343.03	16.479	342.50	9.432	349.02	6.450	354.54	4.437	363.33	3.437	373.20	2.437	383.20	1.437	393.20
2	2.773	187.51	4.437	187.51	2.773	187.51	1.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
3	4.437	187.51	2.773	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
4	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
5	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
6	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
7	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
8	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
9	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
10	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.196	29.08	1.815	231.01	1.729	24.04	1.140	155.22	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
2	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
3	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
4	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
5	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
6	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
7	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
8	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
9	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
10	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51

*** WALL PRESSURES, PER RADIAN ***

WALL NO	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.222	335.77	2.123	336.44	10.024	336.44	2.547	336.44	1.800	336.44	1.800	336.44	1.800	336.44	1.800	336.44
2	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
3	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
4	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
5	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
6	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
7	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
8	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
9	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51
10	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51	0.437	187.51

*** STABILITY PARAMETER

WALL NO
GAP FRACTION

W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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MODE 1 --- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 37 ALPHA-WCL = 2.0 PDP RUN-PT 8.09
RUN 9 ALPHA-BAR = 2.0 Q-COMP = .31950
POINT 6 SIGMA = -135. V-PDF = 198.19
COMPUTED FREQUENCY = 19.17, K = .1519
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	281-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	2	1.110	7.709	1.612	1.430	1.233	1.365	1.582
2	3	1.529	3.695	1.041	1.065	1.082	1.026	1.013
3	4	1.365	1.461	1.051	1.048	1.064	1.046	1.011
4	5	1.661	1.077	1.099	1.049	1.046	1.027	1.009
5	6	1.169	1.728	1.112	1.043	1.048	1.019	1.016
6	7	1.025	1.014	1.017	1.044	1.060	1.013	1.025
7	8	1.314	1.205	1.005	1.048	1.015	1.023	1.005
8	9	1.055	1.078	1.029	1.025	1.038	1.033	1.026
9	10	1.055	1.082	1.012	1.031	1.010	1.011	1.011
10		1.261	1.152	1.005	1.007	1.034	1.014	1.009
				1.026	1.043	1.032	1.038	1.005
X	N	774-UPPER CPREAL CPIMAG	862-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	128-LOWER CPREAL CPIMAG	281-LOWER CPREAL CPIMAG
1	2	1.524	1.430	1.229	1.794	1.464	1.963	3.315
2	3	1.055	1.020	1.014	1.363	1.853	1.034	1.092
3	4	1.021	1.016	1.017	1.093	1.072	1.023	1.021
4	5	1.045	1.018	1.033	1.015	1.035	1.044	1.067
5	6	1.000	1.020	1.013	1.018	1.020	1.023	1.016
6	7	1.047	1.017	1.020	1.030	1.020	1.032	1.038
7	8	1.017	1.021	1.020	1.061	1.019	1.011	1.027
8	9	1.009	1.010	1.014	1.062	1.019	1.036	1.017
9	10	1.009	1.010	1.011	1.061	1.019	1.036	1.017
				1.011	1.061	1.019	1.036	1.017
X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	862-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG	
1	2	1.879	1.513	1.466	1.062	1.018	1.374	2.466
2	3	1.022	1.020	1.010	1.024	1.023	1.019	1.009
3	4	1.021	1.020	1.010	1.024	1.023	1.019	1.009
4	5	1.021	1.020	1.010	1.024	1.023	1.019	1.009
5	6	1.021	1.020	1.010	1.024	1.023	1.019	1.009
6	7	1.021	1.020	1.010	1.024	1.023	1.019	1.009
7	8	1.021	1.020	1.010	1.024	1.023	1.019	1.009
8	9	1.021	1.020	1.010	1.024	1.023	1.019	1.009
9	10	1.021	1.020	1.010	1.024	1.023	1.019	1.009
				1.010	1.024	1.023	1.019	1.009

MODE 1 -- CENTER PERIODICITY TEST
OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 37 ALPHA-MCL = 2.0 POP RUN.PI 8.09
RUN 8 ALPHA-PAR = 2.0 Q-COMP = .31950
POINT 2 SIGMA = -135. V-REF = 198.19
COMPUTED FREQUENCY = 19.17, K = .1519
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	062-UPPER CP-MAG	PHI	148-UPPER CP-MAG	PHI	261-UPPER CP-MAG	PHI	392-UPPER CP-MAG	PHI	510-UPPER CP-MAG	PHI	661-UPPER CP-MAG	PHI
1	25	312	162.27	7.609	167.77	4.442	174.45	3.204	184.16	3.118	194.54	3.501	202.94	3.474	207.08
2	4	715	231.21	.051	300.76	.065	274.47	.083	276.93	.141	275.00	.104	255.53	.028	332.36
3	4	665	186.62	.112	27.57	.069	314.40	.071	294.72	.045	260.00	.046	180.74	.016	355.45
4	5	747	256.91	.034	4.65	.113	3.92	.084	4.28	.073	20.99	.036	49.48	.038	13.94
5	5	747	256.91	.034	213.36	.051	236.35	.063	229.58	.073	190.99	.033	235.06	.029	211.93
6	7	.029	210.23	.032	212.31	.044	238.98	.060	272.11	.117	288.41	.030	296.07	.026	168.86
7	7	.375	213.19	.049	354.10	.050	325.44	.029	328.24	.045	92.66	.029	322.07	.061	334.88
8	8	.096	303.27	.043	116.97	.022	195.75	.032	195.26	.036	105.82	.010	110.56	.014	141.27
9	9	.098	123.91	.037	19.50	.042	347.11	.009	323.55	.030	36.22	.013	24.96	.026	312.33
10	10	305	211.15	.046	185.96	.034	218.74	.047	204.56	.039	235.04	.040	250.02	.006	326.04

X	N	CP-MAG	PHI	860-UPPER CP-MAG	PHI	910-UPPER CP-MAG	PHI	012-LOWER CP-MAG	PHI	062-LOWER CP-MAG	PHI	148-LOWER CP-MAG	PHI	261-LOWER CP-MAG	PHI
1	2	901	209.53	2.258	212.98	1.776	213.05	16.713	340.92	9.063	335.86	5.156	344.07	3.408	346.53
2	3	.055	2.16	.025	324.96	.017	252.31	.128	136.53	.357	230.04	.120	301.46	.080	296.13
3	3	.030	21.33	.022	222.30	.039	38.12	.074	101.51	.179	58.61	.076	164.04	.029	108.13
4	4	.048	21.65	.031	27.06	.018	189.31	.056	35.12	.133	127.42	.073	67.54	.019	171.30
5	5	.028	195.75	.019	170.63	.024	172.35	.038	287.93	.133	309.10	.124	290.91	.092	281.73
6	7	.050	338.55	.027	339.47	.052	330.57	.036	33.32	.060	71.92	.050	49.71	.054	38.93
7	8	.010	100.46	.007	98.79	.012	61.69	.080	319.22	.054	308.40	.033	346.21	.021	54.56
8	9	.026	310.04	.038	307.15	.025	303.34	.062	176.05	.011	98.40	.029	291.77	.042	317.13
9	10	.021	296.11	.008	328.42	.013	278.04	.064	342.97	.027	314.61	.040	24.59	.005	355.41

X	N	CP-MAG	PHI	530-LOWER CP-MAG	PHI	661-LOWER CP-MAG	PHI	774-LOWER CP-MAG	PHI	860-LOWER CP-MAG	PHI	910-LOWER CP-MAG	PHI
1	1	909	349.78	1.520	354.50	.727	6.97	.402	257.07	.438	226.26	.282	299.09
2	3	.101	321.39	.027	302.72	.130	309.34	.126	257.07	.143	249.01	.076	167.75
3	3	.033	16.07	.022	337.21	.093	28.68	.088	22.94	.027	321.63	.021	255.91
4	4	.022	16.07	.022	27.19	.063	294.30	.083	97.90	.076	90.22	.031	68.32
5	5	.073	167.38	.033	78.58	.024	334.89	.028	2.79	.024	145.59	.010	275.53
6	7	.028	280.25	.039	286.96	.024	250.09	.085	306.12	.055	291.18	.060	287.28
7	8	.028	58.16	.032	69.92	.021	41.16	.035	28.40	.039	47.01	.014	32.44
8	8	.026	28.38	.023	28.02	.033	85.32	.031	355.19	.018	55.05	.016	33.15
9	9	.034	329.50	.047	332.18	.045	339.51	.040	323.86	.029	341.18	.023	2.70
10	10	.010	204.16	.017	175.18	.007	11.19	.036	228.54	.029	232.64	.036	229.15

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 37 ALPHA-WCL = 2.0 PDP RUN-PT 8.09
RUN 6 ALPHA-PAD = 2.0 C-COMP = .31950
POINT 6 SIGMA = -135. V-DEF = 198.19
COMPUTED FREQUENCY = 19.17, K = .1519

FOUPIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.142	.261	.392	.530	.661
N	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	39.934	-13.172	15.705	-5.318	9.344	-1.846	6.519
2	1.566	1.241	-1.592	0.446	-0.591	0.882	0.446
3	-1.458	1.589	-0.231	0.425	-0.014	0.006	0.372
4	0.646	1.149	-0.192	0.123	0.186	0.021	0.049
5	0.215	0.760	-0.052	0.043	0.056	0.066	0.019
6	0.043	0.241	-0.011	0.016	0.076	0.024	0.004
7	0.009	0.056	-0.002	0.002	0.019	0.009	0.003
8	-0.007	0.006	-0.001	0.001	0.001	0.001	0.001
9	-0.007	0.006	-0.001	0.001	0.001	0.001	0.001
10	0.322	0.139	0.055	0.015	0.062	0.019	0.005

X =	.774	.850	.910
N	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	2.925	1.449	1.626
2	-0.883	-0.125	0.722
3	-0.084	0.045	0.043
4	-0.053	0.045	0.025
5	-0.047	0.007	0.020
6	-0.041	0.001	0.010
7	-0.032	0.001	0.005
8	-0.016	0.001	0.002
9	-0.004	0.001	0.001
10	0.033	0.004	0.001

*** STABILITY PARAMETER

* XI = .5564 *

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	N	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	2.361	-1.223	1.988	-2.590	6.211
2	-0.027	-0.028	0.256	-0.043	1.586
3	0.090	-0.033	0.196	0.009	0.015
4	-0.027	-0.013	0.024	-0.003	0.036
5	-0.027	-0.013	0.008	-0.003	0.044
6	-0.027	-0.013	0.008	-0.003	0.044
7	-0.027	-0.013	0.008	-0.003	0.044
8	-0.027	-0.013	0.008	-0.003	0.044
9	-0.027	-0.013	0.008	-0.003	0.044
10	-0.012	-0.011	0.005	-0.003	0.018

ORIGINAL PAGE IS
OF POOR QUALITY.

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 37 ALPHA-MCL = 2.0 POP RUN.PT 8.09
RUN 8 ALPHA-PAR = 2.0 Q-COMP = .31950
POINT 6 SIGMA = -135. V-REF = 198.19
COMPUTED FREQ. = 19.17, X = .1519

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.022	341.73	16.581	341.29	9.564	348.87	6.534	355.07	4.917	5.18	4.892	18.43
2	2.417	49.62	600	175.55	.091	269.36	.083	7.42	.102	49.50	.096	355.79
3	2.663	128.84	.399	234.50	.055	285.01	.010	306.32	.060	54.19	.071	335.13
4	.790	74.91	.145	97.51	.123	175.92	.095	167.08	.027	203.39	.076	235.80
5	.790	74.91	.133	112.82	.081	162.93	.081	184.49	.067	133.39	.064	266.80
6	.059	316.38	.140	322.13	.081	296.46	.035	297.61	.046	121.53	.130	284.50
7	.411	33.20	.069	115.44	.053	107.99	.052	69.89	.027	308.03	.067	294.54
8	.026	77.65	.096	134.14	.053	357.87	.053	11.36	.039	325.10	.024	4.52
9	.078	264.60	.037	181.81	.035	211.51	.053	315.32	.035	278.75	.020	317.86
10	.351	23.33	.067	347.44	.073	31.07	.052	211.73	.031	64.50	.039	95.05

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	3.264	26.33	1.834	29.84	1.779	23.95	6.365	357.00	4.917	5.18	4.892	18.43
2	.150	29.10	.037	235.50	.035	46.44	.010	42.97	.102	49.50	.096	355.79
3	.096	139.91	.068	119.35	.020	168.47	.074	161.51	.060	54.19	.071	335.13
4	.048	8.28	.011	100.79	.023	337.94	.074	161.51	.027	203.39	.076	235.80
5	.065	320.83	.051	311.08	.023	304.56	.059	295.69	.067	133.39	.064	266.80
6	.035	339.59	.055	118.41	.051	135.34	.042	91.92	.046	121.53	.130	284.50
7	.016	346.36	.014	35.79	.008	344.46	.030	351.72	.027	308.03	.067	294.54
8	.034	193.69	.021	217.65	.024	65.92	.015	301.66	.039	325.10	.024	4.52
9			.031	217.65	.024	65.92	.026	336.54	.035	278.75	.020	317.86
10									.031	64.50	.039	95.05

*** STABILITY PARAMETER ***

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.687	331.46	2.306	329.44	10.016	168.44	2.609	186.86	7.880	37.99	1.931	325.22
2	.039	133.93	.277	315.09	.467	313.73	.085	307.74	1.931	325.22	.041	30.12
3	.041	335.23	.037	350.17	.030	283.85	.054	307.93	.094	62.30	.094	62.30
4	.030	205.73	.065	257.44	.171	288.83	.017	230.04	.106	202.83	.106	202.83
5	.054	237.79	.043	257.80	.051	310.41	.057	230.04	.107	27.35	.107	27.35
6	.046	156.10	.018	14.70	.027	325.00	.021	163.03	.075	325.22	.075	325.22
7	.008	137.49	.024	257.83	.031	351.16	.024	163.03	.075	325.22	.075	325.22
8	.017	211.69	.010	177.70	.018	198.24	.024	163.03	.075	325.22	.075	325.22
9												
10												

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 13 ALPHA-WCL = 2.0 PDP RUN-PT 5.04
RUN 5 ALPHA-RAR = 2.0 O-COMP = 31749
POINT 1 SIGMA = -90. V-REF = 197.56
COMPUTED FREQUENCY = 9.09, K = .0722

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	21	1.181	1.136	-6.820	2.181	-2.907	-2.523	-2.435	-2.147
2	33	1.495	-2.595	-6.664	1.033	-2.066	-2.078	-1.137	-1.163
3	43	1.473	-1.996	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
4	53	1.473	-1.504	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
5	63	1.473	-1.317	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
6	73	1.473	-1.019	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
7	83	1.473	-0.738	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
8	93	1.473	-0.473	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
9	103	1.473	-0.212	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
10	113	1.473	-0.131	-6.284	1.033	-2.066	-2.078	-1.137	-1.163

X	N	CPREAL	CPIMAG	.062-LOWER	.148-LOWER	.261-LOWER	.392-LOWER	.530-LOWER	.661-LOWER
1	21	1.181	1.136	-6.820	2.181	-2.907	-2.523	-2.435	-2.147
2	33	1.495	-2.595	-6.664	1.033	-2.066	-2.078	-1.137	-1.163
3	43	1.473	-1.996	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
4	53	1.473	-1.504	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
5	63	1.473	-1.317	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
6	73	1.473	-1.019	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
7	83	1.473	-0.738	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
8	93	1.473	-0.473	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
9	103	1.473	-0.212	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
10	113	1.473	-0.131	-6.284	1.033	-2.066	-2.078	-1.137	-1.163

X	N	CPREAL	CPIMAG	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	21	1.181	1.136	-6.820	2.181	-2.907	-2.523	-2.435	-2.147
2	33	1.495	-2.595	-6.664	1.033	-2.066	-2.078	-1.137	-1.163
3	43	1.473	-1.996	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
4	53	1.473	-1.504	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
5	63	1.473	-1.317	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
6	73	1.473	-1.019	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
7	83	1.473	-0.738	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
8	93	1.473	-0.473	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
9	103	1.473	-0.212	-6.284	1.033	-2.066	-2.078	-1.137	-1.163
10	113	1.473	-0.131	-6.284	1.033	-2.066	-2.078	-1.137	-1.163

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 13 ALPHA-MCL = 2.0 PDP RUN-PT 5.04
RUN 13 ALPHA-BAR = 2.0 O-COMP = 31749
POINT 1 SIGMA = -90.0 V-REF = 197.56
COMPUTED FREQUENCY = 9.09, K = .0722

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

N	X	CP-MAG	UPPER PHI	860-UPPER PHI	CP-MAG	UPPER PHI	148-UPPER PHI	CP-MAG	UPPER PHI	261-UPPER PHI	CP-MAG	UPPER PHI	392-UPPER PHI	CP-MAG	UPPER PHI	530-UPPER PHI	CP-MAG	UPPER PHI	661-UPPER PHI
1	23	.001	154.43	7.169	162.29	4.157	171.35	2.916	184.37	2.708	201.30	3.045	217.20	3.133	226.41	3.045	217.20	3.133	226.41
2	4	.000	214.02	.071	152.93	.112	129.03	.122	122.85	.139	124.35	.220	128.56	.326	120.01	.220	128.56	.326	120.01
3	1	.000	292.80	.287	326.54	.346	313.98	.353	311.60	.372	306.09	.391	309.58	.398	321.36	.391	309.58	.398	321.36
4	6	.000	133.14	.087	7.79	.118	351.01	.098	346.73	.060	343.16	.032	63.61	.005	85.26	.032	63.61	.005	85.26
5	6	.000	209.27	.019	33.94	.027	10.36	.044	308.56	.027	152.72	.078	157.80	.050	23.05	.078	157.80	.050	23.05
6	6	.000	131.15	.050	110.11	.021	117.46	.033	230.57	.007	127.90	.049	300.91	.023	143.49	.049	300.91	.023	143.49
7	6	.000	224.65	.025	83.14	.029	263.05	.012	37.57	.056	43.49	.043	51.89	.019	315.40	.043	51.89	.019	315.40
8	9	.000	131.88	.031	326.82	.027	319.43	.003	90.90	.016	341.21	.027	310.27	.021	333.65	.027	310.27	.021	333.65
10	10	.000	126.72	.031	326.82	.027	319.43	.003	90.90	.016	341.21	.027	310.27	.021	333.65	.027	310.27	.021	333.65

N	X	CP-MAG	UPPER PHI	860-UPPER PHI	CP-MAG	UPPER PHI	148-UPPER PHI	CP-MAG	UPPER PHI	261-UPPER PHI	CP-MAG	UPPER PHI	392-UPPER PHI	CP-MAG	UPPER PHI	530-UPPER PHI	CP-MAG	UPPER PHI	661-UPPER PHI
1	2	.000	231.25	2.227	233.97	1.808	234.86	14.541	128.99	8.310	322.26	4.525	324.89	3.066	322.82	4.525	324.89	3.066	322.82
2	3	.000	117.11	.350	120.56	.328	124.35	.307	329.44	1.573	270.23	.351	310.64	.199	186.19	.351	310.64	.199	186.19
3	4	.000	335.89	.063	341.72	.057	346.75	.080	329.44	.442	64.52	.044	350.66	.050	309.40	.044	350.66	.050	309.40
4	5	.000	71.79	.023	76.44	.014	81.01	.037	202.50	.122	163.52	.064	359.31	.038	348.72	.064	359.31	.038	348.72
5	6	.000	345.37	.051	134.40	.054	139.04	.019	248.52	.064	157.44	.035	154.19	.060	154.86	.035	154.19	.060	154.86
6	7	.000	138.46	.021	134.23	.015	137.16	.046	145.86	.040	271.98	.018	96.25	.021	127.73	.018	96.25	.021	127.73
7	8	.000	297.75	.021	311.88	.012	317.86	.030	193.78	.039	226.98	.028	343.24	.029	127.57	.028	343.24	.029	127.57
8	9	.000	41.63	.015	331.51	.012	317.86	.030	193.78	.039	226.98	.028	343.24	.029	127.57	.028	343.24	.029	127.57
10	10	.000	280.95	.015	331.51	.012	317.86	.030	193.78	.039	226.98	.028	343.24	.029	127.57	.028	343.24	.029	127.57

N	X	CP-MAG	UPPER PHI	860-UPPER PHI	CP-MAG	UPPER PHI	148-UPPER PHI	CP-MAG	UPPER PHI	261-UPPER PHI	CP-MAG	UPPER PHI	392-UPPER PHI	CP-MAG	UPPER PHI	530-UPPER PHI	CP-MAG	UPPER PHI	661-UPPER PHI
1	1	.000	320.50	1.492	318.87	.754	311.31	.645	299.08	.978	280.88	.464	288.70	.464	288.70	.464	288.70	.464	288.70
2	3	.000	314.07	.358	318.54	.326	322.84	.367	328.38	.311	314.16	.251	311.77	.251	311.77	.251	311.77	.251	311.77
3	4	.000	1.53	.067	352.27	.100	310.16	.066	311.40	.058	314.60	.058	350.18	.058	350.18	.058	350.18	.058	350.18
4	5	.000	322.96	.026	11.40	.047	351.96	.037	9.45	.029	112.26	.038	32.47	.038	32.47	.038	32.47	.038	32.47
5	6	.000	8.05	.069	140.55	.022	327.70	.024	120.23	.059	115.96	.024	119.68	.024	119.68	.024	119.68	.024	119.68
6	7	.000	133.81	.027	147.00	.033	147.00	.024	328.07	.017	229.11	.027	313.05	.027	313.05	.027	313.05	.027	313.05
7	8	.000	148.77	.012	126.68	.030	107.65	.024	40.77	.017	55.09	.027	57.66	.027	57.66	.027	57.66	.027	57.66
8	9	.000	15.05	.033	332.03	.027	356.96	.024	257.66	.021	281.83	.027	278.25	.027	278.25	.027	278.25	.027	278.25
10	10	.000	218.54	.004	313.21	.016	356.96	.024	257.66	.021	281.83	.027	278.25	.027	278.25	.027	278.25	.027	278.25

MODE 1 -- CWT PERIODICITY TEST
CENTED BLADE DATA, WALL STATIONS

FILE 13 ALPHA-MCL = 2.0 PGP RUN-PI 5.04
RUN-PI ALPHA-BUR = 2.0 O-COMP = 31749
POINT 1 SIGMA = -90. V-DEF = 197.56
COMPUTED FREQUENCY = 9.09, K = .0722

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	.062		.148		.261		.392		.530		.661	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	33.643	-17.627	13.489	-7.152	7.812	-3.228	5.350	-1.631	3.898	-.150	-.054	-.025
2	2.342	2.140	-1.226	.304	-1.050	.053	-.079	.090	-.081	.024	.025	.025
3	-.134	-.845	-.237	-.415	-.008	-.014	-.002	-.023	-.010	.005	.018	.069
4	.542	-.545	.103	.387	.017	-.030	-.056	.054	-.037	.019	-.014	-.065
5	.538	.307	-.173	.016	.017	-.012	.037	-.003	.049	-.029	-.028	-.012
6	.098	.047	-.023	.019	.022	.032	.015	.018	.027	-.019	-.021	.004
7	.275	-.341	-.040	.019	-.022	-.004	.012	-.017	.013	.013	-.025	.005
8	.172	-.263	-.038	.012	.018	-.003	.020	-.005	-.014	.031	.011	-.005
9	.041	-.143	-.053	-.012	-.030	-.021	-.007	-.011	-.021	.001	-.003	.009
10	.085	-.160										

N	.774		.910		.960		.960		.960		.960	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	1.232	1.452	1.452	1.452	1.452	1.452	1.452	1.452	1.452	1.452	1.452	1.452
2	-.018	-.050	-.077	-.077	-.077	-.077	-.077	-.077	-.077	-.077	-.077	-.077
3	.056	.064	.034	.034	.034	.034	.034	.034	.034	.034	.034	.034
4	.037	.023	.012	.012	.012	.012	.012	.012	.012	.012	.012	.012
5	.036	.028	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007
6	.017	.005	.006	.006	.006	.006	.006	.006	.006	.006	.006	.006
7	.008	.006	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004
8	.006	.006	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004
9	.006	.006	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004
10	.006	.006	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004

*** STABILITY PARAMETER

* XI = .774

WALL NO. GAP FRACTION	.125		.125		.125		.125		.125		.125	
	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG
1	1.005	-2.043	1.340	-1.778	-1.089	-9.233	2.505	-2.426	1.263	0.569	1.263	0.569
2	.063	.300	.424	.340	-.565	-1.497	-.744	-.350	.316	.316	.316	.316
3	.068	.330	.376	.339	-.067	-.041	-.151	.045	-.045	.045	.045	.045
4	.027	.308	.102	.067	-.067	-.041	-.151	.045	-.045	.045	.045	.045
5	.026	.311	.089	.067	-.067	-.041	-.151	.045	-.045	.045	.045	.045
6	.023	.314	.067	.067	-.067	-.041	-.151	.045	-.045	.045	.045	.045
7	.022	.314	.067	.067	-.067	-.041	-.151	.045	-.045	.045	.045	.045
8	.022	.314	.067	.067	-.067	-.041	-.151	.045	-.045	.045	.045	.045
9	.022	.314	.067	.067	-.067	-.041	-.151	.045	-.045	.045	.045	.045
10	.022	.314	.067	.067	-.067	-.041	-.151	.045	-.045	.045	.045	.045

*** WALL PRESSURES, PER RADIAN ***

MODE 1 -- OCW1 PERIODICITY TEST
CENTIFUGAL BLADE DATA, WALL STATIONS

FILE 13 ALPHA-MCL = 2.3 PDP RUN-PT 5.04
KUM ALPHA-MAP = 2.0 Q-COMP = .31749
POINT 1 SIGMA = -90. V-PEF = 197.56
COMPUTED FREQUENCY = 9.09, K = .0722
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	
		.012		.062		.149		.261		.392		.530		.661		
1	1	.37	.981	332.335	15	.262	332.07	8	.452	337.55	5	.593	343.05	3	.901	357.80
2	2	.33	.173	42.42	1	.070	163.51	0	.073	133.12	0	.097	33.77	0	.097	33.77
3	3	.854	.768	120.41	4	.478	240.23	1	.016	241.40	0	.086	96.97	0	.086	96.97
4	4	.5	.612	29.67	5	.455	75.04	0	.096	156.11	0	.020	111.06	0	.020	111.06
5	5	.612	.109	25.44	6	.176	174.66	0	.021	323.02	0	.057	329.57	0	.057	329.57
6	6	.478	.478	335.00	7	.240	354.40	0	.048	41.05	0	.028	14.98	0	.028	14.98
7	7	.311	.311	56.50	8	.044	235.00	0	.022	149.35	0	.047	305.06	0	.047	305.06
8	8	.146	.146	253.75	9	.017	235.55	0	.047	28.07	0	.019	134.99	0	.019	134.99
9	9	.121	.121	253.02	10	.033	239.76	0	.018	353.45	0	.034	245.19	0	.034	245.19
10	10				11	.054	172.26	0	.037	145.95	0	.021	176.64	0	.021	176.64

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	N	CM-MAG	PHIM
		.774		.910						
1	1	2.417	36.94	1.712	29.31	1.580	41.15	1	1.440	327.29
2	2	.123	261.60	.112	219.68	.152	141.00	2	.051	379.50
3	3	.075	41.58	.041	204.06	.078	144.30	3	.011	201.19
4	4	.064	47.42	.054	102.89	.029	65.20	4	.009	38.95
5	5	.035	319.20	.017	164.68	.029	55.92	5	.006	61.82
6	6	.054	333.66	.011	8.85	.005	126.99	6	.011	11.49
7	7	.017	343.56	.011	55.62	.005	313.73	7	.008	286.80
8	8	.010	34.51	.029	97.40	.008	143.96	8	.031	93.26
9	9	.010	223.74	.009	236.23	.002	327.55	9	.006	58.69
10	10	.010	210.42	.016	235.75	.011	234.36	10	.002	238.34

*** STABILITY PARAMETER

* XI = .7784

WALL NO.	GAP FRACTION, N	W1 - .125 CP-MAG	PHI	W2 - .032 CP-MAG	PHI	W4 - .125 CP-MAG	PHI	W6 - .500 CP-MAG	PHI	W10 - .125 CP-MAG	PHI
1	1	2.313	295.75	2.226	301.95	9.567	164.82	2.479	191.83	6.689	79.12
2	2	.385	90.36	.348	209.34	2.252	221.67	.211	150.77	1.461	55.07
3	3	.469	311.22	.706	209.91	.905	194.77	.472	317.97	.163	329.33
4	4	.077	17.22	.086	27.25	.070	324.01	.064	45.57	.163	279.33
5	5	.023	15.65	.119	329.73	.151	261.73	.085	357.01	.074	143.26
6	6	.036	144.07	.028	370.85	.109	333.64	.061	146.70	.084	34.15
7	7	.095	144.07	.091	137.57	.984	126.95	.049	146.26	.117	243.15
8	8	.014	97.19	.032	242.94	.024	227.44	.019	232.28	.074	243.22
9	9	.024	32.72	.005	194.75	.045	166.93	.041	58.60	.011	271.41
10	10	.016	225.41	.024	232.56	.058	290.36	.032	283.28	.029	314.24

*** WALL PRESSURES, PER RADIAN ***

MODE 1 -- OCWT PERIODICITY TEST
 CENTER BLADE DATA, WALL STATIONS

FILE 15 ALPHA-MCL = 2.0 PDP RUN-PT 5.07
 RUN 15 ALPHA-RAR = 2.0 O-COMP = 32192
 POINT 3 SIGMA = -90. V-REF = 198.96
 3 COMPUTED FREQUENCY = 15.43, K = .1218

FOURIER COEFFICIENTS, REAL & IMAGINARY
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.662-UPPER CPREAL	.662-UPPER CPIMAG	.148-UPPER CPREAL	.148-UPPER CPIMAG	.261-UPPER CPREAL	.261-UPPER CPIMAG	.392-UPPER CPREAL	.392-UPPER CPIMAG	.530-UPPER CPREAL	.530-UPPER CPIMAG	.661-UPPER CPREAL	.661-UPPER CPIMAG
1	-23.152	11.271	-6.611	2.802	-3.591	1.108	-2.841	1.174	-2.517	-.602	-.020	-.054	-1.426	-2.152	-1.863
2	-3.314	-2.364	.098	.024	.104	-.013	.100	-.011	.092	-.020	.028	.054	.050	.048	.153
3	-1.156	-.920	.125	.061	.094	-.009	.076	-.022	.044	-.078	.019	.029	.043	.009	.033
4	-.154	-.370	.021	-.084	.042	-.111	.020	-.100	.018	-.078	.040	.029	.034	.008	.041
5	-.681	-.238	.024	-.038	.013	-.041	-.009	-.046	-.018	-.004	.025	.041	.029	.019	.042
6	-.659	-.108	.022	-.016	-.006	-.052	.042	.016	-.058	.039	.052	.029	.029	.053	.024
7	-.226	-.302	.043	.016	.056	-.004	.015	.024	.015	.021	.039	.029	.006	.010	.024
8	-.253	-.094	.011	.009	.002	-.005	-.042	.005	-.020	-.012	.020	.029	.006	.033	.024
9	-.037	.000	-.011	.002	-.018	-.004	.020	.024	-.034	.007	-.020	.020	.003	.035	.009
10	-.107	.260	.006	.002	.018	-.004	.020	.024	-.034	.007	-.020	.020	.003	.035	.009

X	N	CPREAL	CPIMAG	.662-UPPER CPREAL	.662-UPPER CPIMAG	.148-UPPER CPREAL	.148-UPPER CPIMAG	.261-UPPER CPREAL	.261-UPPER CPIMAG	.392-UPPER CPREAL	.392-UPPER CPIMAG	.530-UPPER CPREAL	.530-UPPER CPIMAG	.661-UPPER CPREAL	.661-UPPER CPIMAG
1	-1.610	-1.617	-1.270	-1.367	-.881	-1.010	12.303	-7.572	6.264	-4.768	3.692	2.176	2.441	-1.337	
2	-.046	.165	.043	.119	.027	.066	-1.429	.773	-2.586	.367	.050	.077	.178	.006	
3	-.082	.007	.059	.025	.059	.032	.016	.228	-2.586	-.061	.060	.018	.034	.006	
4	-.021	-.077	-.016	-.083	-.046	-.088	.059	.033	-.258	.065	.030	.016	.023	.006	
5	-.081	-.021	-.046	-.028	.046	-.010	.027	.024	-.043	.014	.035	.047	.024	.006	
6	-.033	-.020	.004	-.008	.044	-.014	.070	.024	.014	.027	.032	.030	.015	.005	
7	-.046	.021	.044	.011	.045	.014	.070	.024	.014	.027	.032	.030	.015	.005	
8	-.015	.021	.044	.011	.045	.014	.070	.024	.014	.027	.032	.030	.015	.005	
9	-.036	.021	.044	.011	.045	.014	.070	.024	.014	.027	.032	.030	.015	.005	
10	-.036	.021	.044	.011	.045	.014	.070	.024	.014	.027	.032	.030	.015	.005	

X	N	CPREAL	CPIMAG	.530-UPPER CPREAL	.530-UPPER CPIMAG	.661-UPPER CPREAL	.661-UPPER CPIMAG	.774-UPPER CPREAL	.774-UPPER CPIMAG	.830-UPPER CPREAL	.830-UPPER CPIMAG	.910-UPPER CPREAL	.910-UPPER CPIMAG
1	-392-LOWER	-.636	1.120	-.342	-.342	-.546	-.546	-.334	-.334	-.273	-.273	-.212	-.212
2	-392-LOWER	-.037	.144	-.027	-.027	-.049	-.049	-.014	-.014	-.043	-.043	-.053	-.053
3	-392-LOWER	-.060	.084	-.038	-.038	-.055	-.055	-.013	-.013	-.043	-.043	-.053	-.053
4	-392-LOWER	-.017	.024	-.007	-.007	-.011	-.011	-.002	-.002	-.015	-.015	-.020	-.020
5	-392-LOWER	-.001	.013	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001
6	-392-LOWER	-.001	.013	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001
7	-392-LOWER	-.001	.013	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001
8	-392-LOWER	-.001	.013	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001
9	-392-LOWER	-.001	.013	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001
10	-392-LOWER	-.001	.013	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001

ORIGINAL PAGE IS
 OF POOR QUALITY

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 15 ALPHA-MCL = 2.0 PDP RUN.PT 5.07
RUN 3 ALPHA-BAR = 2.0 O-COMP = 32192
POINT 3 ALPHA-SIGMA = -2.0 V-PEF = 198.96
COMPUTED FREQUENCY = 15.43, K = .1218
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PEP RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	.390	150.70	7.180	157.03	4.142	153.49	2.846	175.49	2.588	193.46	2.832	210.23
2	3	.337	208.42	.102	146.39	.104	153.46	.101	153.46	.094	147.63	.072	210.23
3	4	.313	219.61	.139	25.99	.095	350.74	.079	344.05	.048	336.15	.052	256.58
4	5	.514	134.03	.087	253.92	.118	280.74	.102	281.49	.079	259.92	.039	299.50
5	6	.721	199.25	.044	302.17	.043	287.08	.042	287.07	.019	200.92	.049	324.17
6	7	.129	302.59	.027	324.55	.053	263.03	.050	249.33	.007	211.20	.048	301.10
7	8	.377	126.73	.046	19.59	.056	356.03	.045	2	.070	34.46	.060	327.67
8	9	.307	197.85	.017	318.44	.005	112.83	.028	121.81	.025	54.53	.011	37.68
9	10	.037	197.85	.014	142.30	.033	208.61	.042	173.31	.023	210.84	.030	167.55
10		.281	112.36	.006	19.01	.019	347.27	.032	150.09	.035	212.00	.020	8.39

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	.292	225.13	1.866	227.11	1.408	225.85	1.447	328.39	7.872	322.91	4.286	329.48
2	3	.171	4.57	.127	22.57	.071	67.69	1.624	208.41	.691	147.91	.091	303.02
3	4	.080	254.74	.064	258.19	.067	28.58	.229	46.08	.266	193.27	.134	16.64
4	5	.053	276.23	.054	329.19	.090	258.61	.068	330.52	.266	14.27	.034	208.80
5	6	.021	278.94	.008	296.77	.054	325.80	.095	267.87	.158	138.02	.058	306.44
6	7	.050	24.96	.045	14.07	.017	17.07	.036	137.84	.115	277.19	.042	224.96
7	8	.026	54.34	.028	72.69	.047	66.99	.071	350.87	.088	25.32	.034	147.24
8	9	.036	174.40	.025	185.59	.027	176.45	.051	98.14	.043	147.62	.040	181.21
9	10	.040	24.11	.035	33.99	.033	26.35	.072	122.62	.013	40.41	.061	41.84

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	.522	335.30	1.180	343.13	.546	1.73	.336	5.39	.278	349.08	.252	327.12
2	3	.146	29.40	.104	36.08	.153	28.25	.023	51.84	.095	67.26	.168	57.50
3	4	.060	266.12	.091	255.97	.136	286.24	.147	273.67	.118	332.64	.099	246.09
4	5	.018	275.14	.030	243.53	.071	288.64	.028	370.50	.051	314.50	.076	317.21
5	6	.028	355.75	.027	102.33	.049	300.56	.049	300.56	.032	324.45	.040	317.21
6	7	.023	107.64	.025	102.33	.037	249.16	.032	249.36	.029	235.52	.029	43.69
7	8	.014	150.07	.021	203.04	.027	192.94	.021	183.31	.018	180.60	.016	175.61
8	9	.032	150.07	.044	47.31	.018	33.84	.019	169.32	.017	64.74	.016	159.57

ORIGINAL
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 15 ALPHA-MCL = 2.0 PDP RUN.PI 5.07
RUN 5 ALPHA-RAR = 2.0 Q-COMP = .32192
POINT 3 SIGMA = -90. V-PEF = 198.96
COMPUTED FREQUENCY = 15.43, K = .1218

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X = .012	.562	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	32.456-13.043	12.875-7.570	7.683-3.284	5.281-1.511	3.900-.053	2.698-.101
2	2.385-1.291	-.685-.391	-.054-.064	-.077-.034	-.090-.057	-.190-.045
3	-.140-1.148	-.122-.115	-.034-.028	-.042-.015	-.056-.018	-.043-.063
4	.677-.143	-.067-.071	-.006-.094	-.033-.024	-.016-.010	-.019-.023
5	-.096-.133	-.008-.076	-.023-.024	-.000-.038	-.038-.014	-.055-.028
6	-.296-.145	-.036-.022	-.023-.012	-.028-.012	-.026-.014	-.028-.010
7	-.295-.145	-.047-.033	-.001-.015	-.001-.015	-.014-.010	-.004-.014
8	-.056-.029	-.011-.004	-.027-.001	-.001-.001	-.010-.015	-.014-.026
9	-.173-.232	.024-.023	.045-.045	.015-.005	.010-.022	-.020-.001

X =	.774	.560	.910																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W10
GAP FRACTION	N	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	1.095-1.535	1.188-1.353	-8.849-3.349	-2.404-.041	1.446-7.112	1.125-1.119
2	.161-.105	.674-.212	-1.488-.280	.041-.127	1.164-.195	1.119-.068
3	.103-.050	.015-.001	.023-.032	-.001-.036	.121-.046	.068-.191
4	.026-.015	.012-.011	.032-.032	.046-.004	-.046-.056	.011-.040
5	.006-.006	.011-.034	.002-.004	.059-.005	-.056-.033	.040-.023
6	.007-.013	.004-.017	.004-.043	.009-.016	-.000-.041	.019-.032
7	.007-.013	.004-.017	.004-.043	.009-.016	-.000-.041	.019-.032
8	.007-.013	.004-.017	.004-.043	.009-.016	-.000-.041	.019-.032
9	.007-.013	.004-.017	.004-.043	.009-.016	-.000-.041	.019-.032
10	.007-.013	.004-.017	.004-.043	.009-.016	-.000-.041	.019-.032

*** STABILITY PARAMETER

* XI = .8178 *

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 15 ALPHA-MCL = 2.0 PDP RUN-PT 5.07
RUN 3 ALPHA-RAR = 32.0 O-COMP = 32.02
POINT 3 SIGMA = -90. VREF = 198.96
COMPUTED FREQUENCY = 15.43, K = .1218
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =		.062		.148		.261		.392		.530		.661	
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM
1	37.529	329.86	14.935	329.55	8.356	336.86	5.493	348.08	3.900	359.51	3.737	16.86	3.288
2	1.713	328.43	.402	150.29	.084	229.98	.025	336.08	.053	352.29	.119	16.28	.215
3	1.157	326.96	.280	157.63	.044	140.77	.046	159.66	.061	69.055	.059	18.15	.072
4	.600	317.66	.164	32.26	.118	127.11	.086	120.33	.021	60.55	.069	233.68	.076
5	.692	111.92	.101	131.14	.023	345.28	.039	327.69	.043	301.26	.041	197.25	.028
6	.431	125.87	.099	265.61	.033	136.23	.038	85.95	.014	268.30	.017	159.71	.059
7	.431	313.33	.057	31.14	.024	183.39	.029	255.14	.050	233.16	.036	223.47	.030
8	.320	126.90	.057	144.86	.018	60.21	.012	95.34	.022	176.58	.022	128.47	.010
9	.083	152.38	.011	22.13	.053	58.67	.027	2.61	.016	65.58	.018	304.23	.030
10	.290	306.69	.033	44.27	.053	58.67	.027	19.12	.024	114.26	.031	71.64	.020

X =		.800		.910	
N	DELCPM	PHI	DELCPM	PHI	DELCPM
1	2.589	40.47	1.478	16.27	1.478
2	.075	44.75	.052	96.52	.052
3	.053	66.32	.022	124.55	.022
4	.023	253.41	.018	185.63	.018
5	.030	314.99	.003	165.70	.003
6	.023	232.53	.025	165.36	.025
7	.033	237.53	.016	273.65	.016
8	.015	234.05	.022	182.44	.022
9	.030	177.44	.022	182.44	.022
10					

WALL NO.		W1		W2		W4		W6		W10	
GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.886	395.51	1.801	311.29	9.461	159.27	2.405	179.06	7.258	78.54	78.54
2	.192	33.23	.931	311.64	.540	223.15	.043	342.44	1.615	43.43	43.43
3	.114	25.90	.285	311.97	.143	279.41	.127	359.71	.179	22.43	22.43
4	.064	294.00	.072	345.50	.155	258.23	.042	240.39	.226	237.58	237.58
5	.027	283.53	.036	279.88	.024	273.95	.075	307.36	.047	193.51	193.51
6	.057	245.04	.033	249.35	.024	273.95	.004	524.80	.069	35.75	35.75
7	.024	144.48	.025	333.27	.062	224.62	.059	111.41	.048	270.00	270.00
8	.015	165.65	.025	179.46	.043	205.81	.010	65.69	.041	56.76	56.76
9	.047	147.83	.046	178.38	.010	75.81	.033	65.03	.023	63.20	63.20
10											

*** WALL PRESSURES, PER RADIAN ***

*** STABILITY PARAMETER ***

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
 MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 17 ALPHA-MCL = 2.0 POP RUN-PT 5.09
 RUN 5 ALPHA-PAR = 2.0 Q-COMP = .31935
 POINT 5 SIGMA = -.90 V-REF = 198.15
 COMPUTED FREQUENCY = 18.97, K = .1524

FOURIER COEFFICIENTS, REAL & IMAGINARY
 *** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.198-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	19	718	11.417	-6.594	2.534	-4.043	739	-2.922
2	3	812	-1.834	.161	-1.102	.154	-.091	-.250
3	5	855	-.055	.050	-.032	-.154	-.091	-.135
4	7	866	-.055	.050	-.032	-.154	-.091	-.135
5	9	881	-.055	.050	-.032	-.154	-.091	-.135
6	11	883	-.055	.050	-.032	-.154	-.091	-.135
7	13	873	-.055	.050	-.032	-.154	-.091	-.135
8	15	863	-.055	.050	-.032	-.154	-.091	-.135
9	17	848	-.055	.050	-.032	-.154	-.091	-.135
10	19	828	-.055	.050	-.032	-.154	-.091	-.135

X	N	.779-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.962-UPPER CPREAL CPIMAG	.990-UPPER CPREAL CPIMAG	.990-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	19	763	-2.137	-1.374	-1.861	-1.087	-1.491	-5.929	2.373
2	3	793	-.093	.092	.015	.066	-.047	-.386	-.182
3	5	824	-.093	.092	.015	.066	-.047	-.386	-.182
4	7	855	-.093	.092	.015	.066	-.047	-.386	-.182
5	9	886	-.093	.092	.015	.066	-.047	-.386	-.182
6	11	917	-.093	.092	.015	.066	-.047	-.386	-.182
7	13	948	-.093	.092	.015	.066	-.047	-.386	-.182
8	15	979	-.093	.092	.015	.066	-.047	-.386	-.182
9	17	1010	-.093	.092	.015	.066	-.047	-.386	-.182
10	19	1041	-.093	.092	.015	.066	-.047	-.386	-.182

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.779-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG	.990-LOWER CPREAL CPIMAG	.990-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG
1	19	262	-.980	-.157	-.160	-.763	-.353	-.206	-.639
2	3	275	-.050	.014	.034	-.018	-.057	-.086	-.008
3	5	287	-.050	.014	.034	-.018	-.057	-.086	-.008
4	7	299	-.050	.014	.034	-.018	-.057	-.086	-.008
5	9	311	-.050	.014	.034	-.018	-.057	-.086	-.008
6	11	323	-.050	.014	.034	-.018	-.057	-.086	-.008
7	13	335	-.050	.014	.034	-.018	-.057	-.086	-.008
8	15	347	-.050	.014	.034	-.018	-.057	-.086	-.008
9	17	359	-.050	.014	.034	-.018	-.057	-.086	-.008
10	19	371	-.050	.014	.034	-.018	-.057	-.086	-.008

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 17 ALPHA-MCL = 2.0 PDF RUN-PT 5.09
RUN 5 ALPHA-PAR = 3.0 Q-COEF = 319.5
POINT 5 SIGMA = -90. V-COEF = 198.15
COMPUTED FREQUENCY = 18.97, K = .1504
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X =	012-UPPER	062-UPPER	148-UPPER	261-UPPER	392-UPPER	510-UPPER	661-UPPER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	22.785	149.93	7.064	158.98	4.110	169.64	2.932
2	4.230	205.69	.191	327.82	.180	328.59	.172
3	.969	260.34	.059	322.86	.135	325.57	.144
4	.573	125.62	.022	328.09	.049	303.99	.030
5	.744	186.26	.017	334.57	.016	289.17	.009
6	.277	291.94	.008	214.33	.008	214.33	.008
7	.423	118.20	.064	232.79	.087	246.92	.058
8	.285	187.61	.039	11.29	.022	180.42	.020
9	.040	348.03	.008	82.65	.029	189.13	.027
10	.301	121.67	.046	174.32	.031	188.62	.011

X =	774-UPPER	666-UPPER	910-UPPER	012-LOWER	062-LOWER	148-LOWER	261-LOWER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	2.771	230.47	1.845	233.57	14.561	325.16	8.009
2	.139	42.08	.072	233.62	1.674	207.38	.384
3	.121	233.82	.098	213.20	.145	111.67	.384
4	.034	139.48	.023	163.13	.021	112.18	.112
5	.032	61.91	.025	17.33	.016	195.41	.112
6	.041	61.81	.036	66.14	.017	192.25	.112
7	.031	254.79	.048	251.87	.017	318.53	.044
8	.021	250.90	.023	320.80	.013	106.12	.010
9	.022	126.87	.021	230.47	.014	269.87	.050
10			.033	113.83	.062	26.12	.057

X =	392-LOWER	510-LOWER	661-LOWER	774-LOWER	860-LOWER	910-LOWER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	1.598	322.19	.569	321.68	.759	254.27
2	.210	322.69	.220	315.89	.604	99.75
3	.090	213.51	.033	294.80	.105	218.04
4	.015	94.48	.070	196.27	.044	75.60
5	.025	131.84	.026	236.31	.019	70.39
6	.014	198.23	.011	164.15	.015	332.79
7	.020	125.12	.041	184.30	.013	242.04
8	.026	104.42	.017	255.47	.010	193.15
9			.043	138.47	.041	158.95
10						

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 17 ALPHA-MCL = 2.0 POP RUN-PT 5.09
RUN 5 ALPHA-PZR = 2.0 Q-COMP = .31935
POINT 5 SIGMA = -.90 V-PEF = 198.15
COMPUTED FREQUENCY = 18.97, K = .1504
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	31.669	19.736	12.523	-7.918	7.609	-3.366	5.299
2	2.386	1.064	-1.540	.425	-1.108	.331	-1.077
3	1.109	1.090	-1.331	.018	-1.005	.045	-.097
4	.326	.446	-1.176	.033	-.061	.043	-.097
5	.723	.077	-.016	.122	.017	.027	-.017
6	-.115	.329	-.048	.053	.017	.029	-.016
7	.251	.417	-.064	.033	.019	.031	-.015
8	.274	-.036	-.044	.000	.018	.006	-.015
9	-.039	.036	-.024	.045	.054	.017	-.003
10	.214	-.229	.051	.252	.043	.075	-.021

X =	.774	.860	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	1.996	1.756	1.164
2	-.068	-.179	-.093
3	.053	.040	.011
4	.041	.033	.027
5	.034	.001	.025
6	.033	.043	.017
7	.027	.011	.012
8	.024	.001	.002
9	.019	.016	.004
10	.019	.016	.004

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W10
GAP FRACTION	N	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	1	.961	-2.142	.994	-2.013	-2.523	1.536
2	2	.181	-.057	.775	-1.353	.119	1.272
3	3	-.001	-.061	-.024	-.060	-.087	.006
4	4	.046	-.050	-.030	-.062	.013	.102
5	5	.015	.043	-.008	-.045	.036	.109
6	6	.012	.043	-.002	-.042	.009	.083
7	7	.029	.029	.010	.008	.019	.073
8	8	.009	.041	.004	.004	.042	.041
9	9	.002	.042	.004	.013	.004	.009
10	10	.002	.042	.004	.013	.004	.009

*** STABILITY PARAMETER

* XI = .842 *

MODE 1 -- 1 360M
OCUT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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17 ALPHA-MCL = 2.0      POP FUN.PI = 5.79
5 ALPHA-DLR = 2.0      C-COMP = 19135
5 SIGMA = -90.         V-DLF = 1913.12
COMPUTED FREQUENCY = 18.97, K = .1504

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X	.012		.052		.148		.261		.392		.530		.661			
	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	
1	37	315	324	107	8	320	336	17	5	504	344	12	3	915	334	164
2	558	142	18	142	224	66	224	103	1	103	290	12	3	915	334	164
3	1	095	12	05	145	77	122	32	3	325	290	12	3	915	334	164
4	552	179	53	179	114	96	122	36	3	325	290	12	3	915	334	164
5	727	196	24	196	114	96	122	36	3	325	290	12	3	915	334	164
6	349	217	97	217	108	40	108	71	3	337	198	71	3	915	334	164
7	487	247	77	247	108	40	108	71	3	337	198	71	3	915	334	164
8	273	264	65	264	108	40	108	71	3	337	198	71	3	915	334	164
9	353	274	56	274	108	40	108	71	3	337	198	71	3	915	334	164
10	313	313	56	313	108	40	108	71	3	337	198	71	3	915	334	164

X	77°		86°		91°		N	CM-MAG		PHIN
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI		CM-MAG	PHIN	
1	2.654	41.412	1.925	48.57	1.478	35.23	1.423	5	333	39.32
2	1.121	27.134	0.051	166.24	0.129	22.554	1.034	352	322	61
3	0.059	37.134	0.051	249.47	0.129	53.087	0.020	400	62	82
4	0.051	181.331	0.051	43.47	0.129	190.707	0.007	400	26	43
5	0.051	189.331	0.051	161.07	0.129	262.247	0.008	400	41	50
6	0.051	212.322	0.051	117.27	0.129	93.066	0.008	400	16	27
7	0.051	215.322	0.051	228.27	0.129	124.071	0.004	400	22	38
8	0.051	170.322	0.051	79.68	0.129	64.071	0.004	400	27	27
9	0.051	170.322	0.051	232.72	0.129	22.554	0.004	400	27	27
10							1.000	322	322	61

*** -ALL PRESSURES, PER RADIAN ***

[illegible]

*** STABILITY PARAMETER

XI = 8442

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 7 ALPHA-MCL = 2.0 PDP RUN-PT 4.01
KUM 4 ALPHA-PAR = 2.0 Q-COMP = .3311
POINT 1 SIGMA = -45.0 V-REF = 201.99
COMPUTED FREQUENCY = 9.09, K = .0707
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.012-UPPER	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	1	-12.975	10.827	-4.945	-4.945	-3.112	-2.240	-1.051	-1.630	-1.388
2	2	-1.003	-1.118	.075	.075	.079	.066	.026	.041	-.055
3	3	-.089	-.214	.051	.051	.076	.028	.076	.046	-.108
4	4	-.161	-.311	.033	.033	.054	.028	.028	.011	-.050
5	5	-.422	-.110	.022	.022	.045	.013	.031	.031	-.021
6	6	-.273	-.136	.019	.019	.036	.008	.022	.034	-.045
7	7	-.045	-.121	.010	.010	.032	.000	.011	.021	-.030
8	8	-.135	.054	.028	.028	.030	.016	.008	.014	-.004
9	9			.019	.019	.034	.000	.009	.001	-.001
10	10			.018	.018	.030	.016	.009	.001	-.001

X	N	CPREAL	CPIMAG	.774-UPPER	.860-UPPER	.910-UPPER	.012-LOWER	.062-LOWER	.148-LOWER	.261-LOWER
1	1	-1.013	-2.594	-6.611	-8.030	-3.450	-7.134	-3.450	-1.713	-9.693
2	2	-.050	-.297	.061	.061	.077	.092	.077	.125	-.043
3	3	-.063	-.039	.048	.048	.071	.192	.071	.119	-.043
4	4	-.034	-.026	.030	.030	.068	.049	.068	.050	-.043
5	5	-.028	-.033	.019	.019	.041	.024	.041	.035	-.026
6	6	-.013	-.031	.006	.006	.025	.001	.025	.017	-.018
7	7	-.006	-.026	.009	.009	.031	.039	.031	.020	-.017
8	8			.007	.007	.031	.007	.031	.000	-.001
9	9			.030	.030	.031	.007	.031	.006	-.001
10	10			.030	.030	.031	.007	.031	.006	-.001

X	N	CPREAL	CPIMAG	.392-LOWER	.530-LOWER	.661-LOWER	.774-LOWER	.860-LOWER	.910-LOWER
1	1	-.441	-1.719	.273	.273	.012	-.021	.168	.054
2	2	-.091	-.256	.111	.111	.134	-.021	.121	.014
3	3	-.039	-.042	.051	.051	.066	-.021	.065	.042
4	4	-.021	-.049	.033	.033	.040	-.049	.037	.044
5	5	-.021	-.029	.019	.019	.033	.049	.033	.030
6	6	-.010	-.029	.014	.014	.040	.011	.017	.032
7	7	-.002	-.034	.009	.009	.031	.011	.012	.028
8	8	-.013	-.014	.007	.007	.029	.000	.015	.023
9	9			.007	.007	.029	.000	.015	.023
10	10			.007	.007	.029	.000	.015	.023

MODE 1 -- OCWJ PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 7 ALPHA-MCL = 2.0 POP RUN-PT 4.01
 RUN 4 ALPHA-BAR = 2.0 Q-COMP = .33111
 POINT 1 SIGMA = -.45 V-REF = 201.89
 COMPUTED FREQUENCY = 9.09, K = .0707
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	PHI	062-UPPER CP-MAG	PHI	148-UPPER CP-MAG	PHI	261-UPPER CP-MAG	PHI	392-UPPER CP-MAG	PHI	530-UPPER CP-MAG	PHI	661-UPPER CP-MAG	PHI
1	16.899	140.16	5.582	152.36	3.191	167.23	2.266	188.77	2.237	214.08	2.704	232.93	3.017	243.46
2	1.254	181.71	.070	290.76	.079	356.39	.072	223.69	.555	62.08	.134	102.93	.208	105.33
3	1.502	228.10	.233	293.76	.271	280.93	.285	275.66	.305	270.74	.273	279.63	.313	290.11
4	1.231	247.99	.075	149.76	.083	203.45	.078	198.36	.086	152.11	.071	99.11	.061	144.11
5	.351	117.39	.045	316.30	.023	313.64	.039	315.09	.042	147.33	.044	315.16	.035	306.86
6	.436	165.44	.029	14.86	.023	119.83	.026	120.62	.037	32.92	.037	330.91	.044	17.57
7	.269	210.20	.040	207.96	.074	217.20	.068	212.09	.039	272.86	.037	205.76	.053	235.70
8	.078	341.60	.019	3.79	.019	291.66	.022	67.84	.024	61.91	.006	96.54	.004	174.42
9	.130	69.67	.027	4.60	.014	43.04	.032	89.55	.012	310.26	.004	355.34	.004	124.16
10	.150	154.59	.034	234.88	.034	213.17	.034	242.07	.041	264.13	.041	250.63	.029	272.22

N	CP-MAG	PHI	860-UPPER CP-MAG	PHI	910-UPPER CP-MAG	PHI	012-LOWER CP-MAG	PHI	062-LOWER CP-MAG	PHI	148-LOWER CP-MAG	PHI	261-LOWER CP-MAG	PHI
1	2.785	248.68	2.524	251.51	2.157	252.15	11.242	309.39	6.783	300.57	3.674	297.61	2.665	291.32
2	.201	104.27	.154	104.79	.124	104.18	11.002	157.57	1.225	131.25	.174	135.63	.100	115.31
3	.312	287.61	.200	287.30	.273	282.86	.355	302.76	.374	223.39	.309	292.39	.307	287.55
4	.074	148.15	.073	154.91	.060	143.51	.094	121.65	.280	224.62	.076	131.37	.075	124.55
5	.047	326.90	.039	332.61	.041	307.68	.083	286.46	.088	352.92	.065	307.30	.073	305.85
6	.034	234.46	.036	235.47	.031	111.72	.055	116.44	.081	216.76	.036	243.64	.027	241.77
7	.048	234.84	.042	232.93	.044	244.46	.041	268.70	.041	216.67	.038	243.64	.037	241.19
8	.005	165.23	.008	200.43	.007	198.45	.050	150.55	.043	234.67	.022	159.61	.016	165.59
9	.013	349.51	.007	10.05	.010	333.98	.039	184.22	.032	86.54	.004	95.55	.008	97.79
10	.027	257.35	.030	265.14	.023	245.98	.032	282.89	.056	205.22	.016	246.18	.016	235.79

N	CP-MAG	PHI	530-LOWER CP-MAG	PHI	661-LOWER CP-MAG	PHI	774-LOWER CP-MAG	PHI	860-LOWER CP-MAG	PHI	910-LOWER CP-MAG	PHI
1	1.775	284.39	1.744	279.00	1.179	270.60	1.288	269.06	1.398	276.80	1.316	272.33
2	.064	101.09	.072	91.58	.048	43.74	.185	131.67	.215	124.11	.136	95.89
3	.271	289.62	.325	269.79	.331	303.22	.311	288.87	.298	282.50	.268	290.11
4	.057	138.08	.065	142.05	.084	169.87	.070	107.48	.069	140.14	.061	141.95
5	.053	308.13	.067	310.78	.056	288.97	.061	118.78	.050	318.27	.049	304.88
6	.022	10.26	.032	19.78	.046	60.64	.049	356.50	.035	359.17	.033	155.29
7	.030	255.29	.042	256.14	.036	247.46	.042	254.11	.022	246.13	.029	258.11
8	.010	181.76	.006	147.04	.016	303.00	.021	210.28	.014	246.83	.004	217.11
9	.004	242.03	.011	303.01	.009	49.53	.001	48.38	.014	233.48	.005	356.61
10	.019	227.47	.024	246.75	.019	247.18	.034	239.60	.026	245.43	.026	245.43

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 7 ALPHA-MCL = 2.0 PDP RUN-PT 4.01
RUN 4 ALPHA-RAP = 2.0 O-COMP = .33111
POINT 1 SIGMA = -45. V-REF = 201.89
COMPUTED FREQUENCY = 9.09, K = .0707

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	N	.012		.062		.148		.261		.392		.530		.661	
		DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	20	1.09	-19.516	8.395	-8.430	4.814	-3.961	3.209	-2.137	2.302	-.460	1.903	-.039	1.361	1.521
3	12	1.128	.457	-.852	1.009	-.804	-.127	-.109	-.062	-.038	-.014	.039	-.037	.089	-.167
5	8	1.195	.819	-.363	-.044	-.066	-.019	.064	-.010	.087	.049	.064	-.031	.074	-.021
7	4	1.255	.294	.319	.079	-.026	.090	.031	-.086	.037	.001	.040	-.021	.033	-.025
9	2	1.315	-.094	.035	.029	-.012	.002	.015	-.032	.005	-.016	.015	-.021	.003	-.026
11	1	1.372	.094	.036	-.006	.042	-.010	.040	-.004	-.002	-.010	.024	-.025	.019	-.011
13	1	1.424	.049	.043	-.037	.042	-.027	.025	-.016	-.021	-.021	.025	-.003	.013	-.014
15	1	1.472	-.124	-.025	.030	-.027	-.011	-.001	-.024	-.009	-.006	.005	-.007	.003	-.005
17	1	1.520	-.096	-.032	.004	-.022	-.004	.007	-.017	-.009	.027	.004	-.017	-.009	.012

X =	N	.774		.860		.910	
		DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	20	1.307	-.003	.963	1.005	.715	-.718
3	12	1.307	.003	-.041	-.029	.016	-.018
5	8	1.307	.003	-.013	-.004	.031	-.014
7	4	1.307	.003	-.005	-.015	.001	-.001
9	2	1.307	.003	-.002	-.003	.005	-.003
11	1	1.307	.003	-.002	-.005	.002	-.001
13	1	1.307	.003	-.002	-.005	.003	-.001
15	1	1.307	.003	-.002	-.005	.003	-.001
17	1	1.307	.003	-.002	-.005	.003	-.001
19	1	1.307	.003	-.002	-.005	.003	-.001
21	1	1.307	.003	-.002	-.005	.003	-.001

*** STABILITY PARAMETER

* XI = .8728 *

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	N	.125		.225		.325		.425		.500		.575		.650		.725		.800		.875		.950	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	20	1.09	-19.516	8.395	-8.430	4.814	-3.961	3.209	-2.137	2.302	-.460	1.903	-.039	1.361	1.521	1.903	-.039	1.361	1.521	1.903	-.039	1.361	1.521
3	12	1.128	.457	-.852	1.009	-.804	-.127	-.109	-.062	-.038	-.014	.039	-.037	.089	-.167	.039	-.037	.089	-.167	.039	-.037	.089	-.167
5	8	1.195	.819	-.363	-.044	-.066	-.019	.064	-.010	.087	.049	.064	-.031	.074	-.021	.064	-.031	.074	-.021	.064	-.031	.074	-.021
7	4	1.255	.294	.319	.079	-.026	.090	.031	-.086	.037	.001	.040	-.021	.033	-.025	.040	-.021	.033	-.025	.040	-.021	.033	-.025
9	2	1.315	-.094	.035	.029	-.012	.002	.015	-.032	.005	-.016	.015	-.021	.003	-.026	.015	-.021	.003	-.026	.015	-.021	.003	-.026
11	1	1.372	.094	.036	-.006	.042	-.010	.040	-.004	-.002	-.010	.024	-.025	.019	-.011	.024	-.025	.019	-.011	.024	-.025	.019	-.011
13	1	1.424	.049	.043	-.037	.042	-.027	.025	-.016	-.021	-.021	.025	-.003	.013	-.014	.025	-.003	.013	-.014	.025	-.003	.013	-.014
15	1	1.472	-.124	-.025	.030	-.027	-.011	-.001	-.024	-.009	.027	.004	-.017	-.009	.027	.004	-.017	-.009	.027	.004	-.017	-.009	.027
17	1	1.520	-.096	-.032	.004	-.022	-.004	.007	-.017	-.009	.027	.004	-.017	-.009	.027	.004	-.017	-.009	.027	.004	-.017	-.009	.027
19	1	1.568	-.142	-.032	.004	-.022	-.004	.007	-.017	-.009	.027	.004	-.017	-.009	.027	.004	-.017	-.009	.027	.004	-.017	-.009	.027

ORIGINAL 1774
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 7 ALPHA-MCL = 2.0 PDP RUN.PT 4.01
RUN 4 ALPHA-PAR = 2.0 Q-COMP = .33111
POINT 1 SIGMA = -45. V-REF = 201.89
COMPUTED FREQUENCY = 9.09, K = .0707

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, PER RADIAN ***

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
		.012	.062	.148	.261	.392	.530	.661					
1	20	.022	315.866	11.897	314.80	6.234	320.55	3.855	326.33	2.348	348.69	1.952	12.87
2	372	11.110	130.19	.366	130.95	.040	148.08	.125	150.28	.141	159.86	.068	305.18
3	449	34.42	136.95	.329	137.89	.094	173.95	.065	151.39	.100	129.54	.074	330.12
4	296	82.75	137.77	.046	137.77	.013	168.33	.032	170.08	.073	273.46	.051	347.46
5	484	346.77	132.69	.067	132.69	.014	352.47	.044	334.46	.019	238.79	.031	300.90
6	250	227.08	129.58	.068	296.58	.043	137.75	.041	6.19	.010	134.32	.034	99.82
7	127	157.27	130.18	.032	130.18	.012	205.49	.024	212.07	.011	224.78	.035	313.82
8	150	235.99	133.45	.032	133.45	.022	10.18	.019	266.69	.028	150.75	.017	205.59
9	172	326.11							67.34		108.08		76.09
10													

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	N	CM-MAG	PHIN	N	CM-MAG	PHIN
		.774		.860		.910									
1	1.641	52.81	1.396	46.10	1.027	45.91	3.349	335.11	.077	122.42	.033	290.37	.021	1.149	310.59
2	.093	218.06	.025	190.51	.035	24.72	.063	46.04	.034	46.04	.021	347.78	.005	.017	91.17
3	.050	32.83	.019	46.75	.002	63.69	.003	46.04	.021	347.78	.005	310.59	.005	.017	91.17
4	.016	201.82	.015	279.17	.003	308.84	.003	308.84	.021	347.78	.005	310.59	.005	.017	91.17
5	.016	356.80	.010	328.22	.017	41.12	.024	9.71	.024	9.71	.005	310.59	.005	.017	91.17
6	.018	356.80	.010	328.22	.017	41.12	.024	9.71	.024	9.71	.005	310.59	.005	.017	91.17
7	.018	356.80	.010	328.22	.017	41.12	.024	9.71	.024	9.71	.005	310.59	.005	.017	91.17
8	.013	267.12	.007	234.70	.003	351.98	.011	201.48	.011	201.48	.003	348.74	.003	.017	91.17
9	.011	193.35	.016	146.44	.003	128.98	.003	128.98	.003	128.98	.003	128.98	.003	.017	91.17
10															

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W10	W125	W10	W125	W10	W125	W10	W125
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.387	258.92	2.305	275.04	7.027	158.82	2.174	200.93	5.579	105.53	1.524	187.53	1.524	187.53
2	.155	108.54	.787	16.65	1.279	206.61	.107	136.69	1.279	206.61	.107	136.69	1.279	206.61
3	.114	285.77	.682	274.21	.763	275.74	.111	138.92	.175	283.83	.175	283.83	.175	283.83
4	.071	327.33	.101	307.99	.087	237.24	.061	41.54	.045	359.80	.045	359.80	.045	359.80
5	.053	216.20	.029	376.37	.025	247.01	.039	252.77	.038	156.48	.038	156.48	.038	156.48
6	.023	216.20	.011	349.59	.087	216.28	.015	48.98	.056	306.01	.056	306.01	.056	306.01
7	.019	96.12	.043	336.67	.004	91.48	.029	243.75						
8	.021	49.37	.051	36.67	.011	220.81								
9	.035	255.57	.052	227.86	.043	252.27								
10														

*** STABILITY PARAMETER

* XI = .8728 *

OCWT PERIODICITY TEST
 MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 9 ALPHA-MCL = 2.0 PDP RUN.PT 4.34
 RUN 4 ALPHA-PAR = 2.0 Q-COMP = .32612
 POINT 3 SIGMA = -45. V-REF = 200.34
 COMPUTED FREQUENCY = 15.49, K = .1214

FOURIER COEFFICIENTS, REAL & IMAGINARY
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	1	-12.084	11.126	-4.672	3.015	-2.953	1.127	-1.431	-1.606	-1.295
2	2	-1.072	-1.734	-0.677	-0.43	-0.13	-0.16	-0.38	-0.43	-0.44
3	3	-1.055	-1.296	-0.277	0.12	0.12	0.00	-0.45	0.33	0.17
4	4	-0.80	-1.347	-0.071	0.06	0.045	-0.45	-0.26	0.05	0.05
5	5	-0.192	-1.149	-0.532	-0.06	-0.09	-0.46	0.11	-0.05	-0.04
6	6	-0.254	-0.19	-0.31	-0.24	-0.09	-0.10	0.06	-0.02	-0.03
7	7	-0.098	-0.563	-0.336	-0.08	-0.02	0.01	-0.06	0.07	-0.07
8	8	-0.006	-1.13	-0.11	-0.08	-0.05	-0.12	-0.06	-0.07	-0.06
9	9	-0.051	0.37	0.01	-0.21	-0.09	0.04	0.09	0.00	0.06
10	10									

X	N	CPREAL	CPIMAG	.062-UPPER	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	1	-1.005	-1.962	-7.43	-1.707	-6.45	-1.441	2.986	-1.616	9.07
2	2	-0.105	-0.115	-0.106	-0.040	-0.056	-0.029	-0.390	-0.177	-0.118
3	3	-0.024	-0.026	-0.014	-0.016	-0.009	-0.026	-0.221	-0.029	-0.020
4	4	-0.055	-0.021	-0.054	-0.028	-0.009	-0.012	-0.175	-0.033	-0.002
5	5	-0.001	-0.010	-0.006	-0.012	-0.012	-0.015	-0.016	-0.041	-0.039
6	6	-0.024	-0.010	-0.029	-0.008	-0.012	-0.004	-0.002	-0.024	-0.018
7	7	-0.006	-0.017	-0.045	-0.004	-0.007	-0.050	-0.002	-0.038	-0.008
8	8	-0.018	-0.021	-0.012	-0.018	-0.014	-0.042	-0.039	-0.028	-0.010
9	9									
10	10									

X	N	CPREAL	CPIMAG	.062-UPPER	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	1	-379	-976	-195	-788	-0.05	-0.358	2.986	-1.616	9.07
2	2	-0.058	-0.013	-0.061	-0.004	-0.077	-0.012	-0.390	-0.177	-0.118
3	3	-0.003	-0.023	-0.016	-0.020	-0.009	-0.026	-0.221	-0.029	-0.020
4	4	-0.050	-0.011	-0.053	-0.026	-0.009	-0.012	-0.175	-0.033	-0.002
5	5	-0.011	-0.011	-0.006	-0.012	-0.012	-0.015	-0.016	-0.041	-0.039
6	6	-0.000	-0.027	-0.006	-0.037	-0.012	-0.004	-0.002	-0.024	-0.018
7	7	-0.066	-0.019	-0.025	-0.002	-0.007	-0.050	-0.002	-0.038	-0.008
8	8	-0.013	-0.019	-0.011	-0.002	-0.014	-0.042	-0.039	-0.028	-0.010
9	9									
10	10									

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 OF POOR QUALITY

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MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 9 ALPHA-MCL = 2.0 POP RUN PT 4.04
RUN 4 ALPHA-RAR = 2.0 Q-COMP = 32612
POINT 3 SIGMA = -45. V-REF = 200.34
COMPUTED FREQUENCY = 15.49, K = .1214
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X =	012-UPPER	062-UPPER	148-UPPER	261-UPPER	392-UPPER	530-UPPER	661-UPPER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	15.426	137.36	5.560	147.16	3.160	159.11	2.144
2	13.079	176.06	.046	247.36	.024	322.57	.007
3	1.286	214.84	.076	27.88	.013	359.65	.034
4	3.307	254.88	.030	155.93	.068	223.53	.058
5	3.392	174.89	.071	174.89	.069	220.17	.047
6	2.290	149.65	.053	141.90	.024	186.28	.051
7	2.65	175.78	.040	141.90	.066	171.85	.022
8	1.13	192.93	.043	213.41	.059	203.15	.032
9	.063	144.37	.014	272.48	.013	158.63	.004
10			.021		.010	158.63	

X =	774-UPPER	860-UPPER	910-UPPER	012-LOWER	062-LOWER	148-LOWER	261-LOWER
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	2.204	242.88	1.892	245.97	10.350	309.97	5.981
2	1.25	132.32	.022	142.59	.066	166.82	1.005
3	.033	11.90	.031	116.84	.080	323.30	.252
4	.058	120.20	.059	204.49	.070	76.66	.187
5	.080	83.30	.010	62.80	.079	248.54	.020
6	.050	202.30	.030	144.37	.050	145.54	.005
7	.050	179.81	.030	176.06	.085	134.72	.005
8	.028	49.08	.017	42.47	.051	277.32	.057
9					.044	71.32	.051
10							

X =	392-LOWER	530-LOWER	661-LOWER	774-LOWER	860-LOWER	910-LOWER	
N	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	
1	1.047	291.24	.812	245.97	.567	266.33	.682
2	.000	167.24	.061	179.68	.121	143.82	.059
3	.033	331.24	.022	117.58	.014	56.48	.019
4	.051	82.62	.054	186.53	.036	68.19	.015
5	.021	192.18	.021	106.59	.061	200.10	.067
6	.027	119.41	.031	60.89	.021	89.10	.012
7	.057	267.84	.034	230.07	.009	258.86	.022
8	.009	272.04	.015	333.34	.066	178.50	.058
9			.014	40.56	.013	55.16	.017
10							.014

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 13.049, K =

X	774		P60		910		N	CNREAL	CNIMAG	N	CHREAL	CHIMAG
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP						
1	945	1.513	707	1.145	632	760	1	2.840	-1.156	1	701	-0.845
2	949	1.014	606	0.604	527	509	2	0.019	0.035	2	006	0.030
3	950	0.010	606	0.006	608	013	3	0.035	0.013	3	010	0.013
4	951	0.036	604	0.003	000	005	4	0.027	0.024	4	005	0.007
5	957	0.032	607	0.010	006	004	5	0.013	-0.007	5	002	-0.003
6	957	0.037	617	0.010	020	010	6	-0.030	-0.025	6	006	-0.003
7	954	0.037	621	0.012	021	036	7	-0.037	0.020	7	001	-0.001
8	959	0.035	601	0.006	007	011	8	0.038	-0.015	8	003	-0.005
9	959	0.035	601	0.006	007	011	9	0.038	-0.015	9	003	-0.005
10	959	0.035	601	0.006	007	011	10	0.038	-0.015	10	003	-0.005

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*** WALL PRESSURES, PER RADIATION ***
WALL NO.      W1      W2      W4      W6      W10
GAP FRACTION  -.125  .000  .125  .500  1.125
CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG
*** STABILITY PARAMETER ***
* XI = .8455 *

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MODE 1 --- OCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 9 ALPHA-XCL = 2.0 PDP RUN.PT 4.04
RUN 4 ALPHA-PAR = 2.0 Q-COMP = 32612
POINT 3 SIGMA = -45. V-DEF = 200.34
COMPUTED FREQUENCY = 15.49, K = .1214

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	26.724	314.51	11.218	313.05	5.822	321.69	3.520	330.05	2.219	354.93
2	2.137	32.08	1.038	111.04	.217	163.41	.127	166.68	.021	187.20
3	1.308	32.08	.301	163.44	.028	304.61	.084	358.35	.039	4.45
4	.387	75.26	.216	138.78	.101	62.44	.084	358.35	.039	4.45
5	.441	290.77	.057	302.21	.026	64.35	.027	340.91	.024	264.56
6	.212	331.11	.103	168.04	.042	180.23	.037	237.66	.024	264.56
7	.276	345.34	.044	119.15	.071	323.60	.056	318.84	.024	264.56
8	.120	270.22	.074	139.67	.064	115.00	.062	161.13	.041	120.01
9	.164	274.42	.057	248.64	.040	217.01	.046	253.99	.012	132.53
10	.066	4.54	.072	24.11	.043	42.62	.028	69.22	.024	36.12

X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH
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*** STABILITY PARAMETER

* XI = .8455

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.596	252.50	1.536	278.55	6.910	152.72	1.948	184.21	5.717	104.44
2	.184	144.49	.335	235.08	1.174	208.51	.146	163.61	.022	171.04
3	.062	358.82	.045	100.63	.053	236.28	.078	350.39	.189	76.31
4	.078	112.04	.045	214.52	.135	197.06	.072	201.22	.210	230.53
5	.039	202.00	.045	159.39	.047	321.65	.029	55.17	.100	338.78
6	.045	210.28	.014	156.39	.064	167.50	.015	173.96	.057	189.62
7	.063	183.17	.047	167.46	.050	195.51	.062	176.96	.063	175.05
8	.024	317.37	.352	248.84	.010	159.52	.012	49.27	.036	172.05
9	.036	77.00	.052	72.07	.021	199.52	.021	49.80	.036	16.31
10										

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTFP BLADE DATA, WALL STATIONS

FILE 11 ALPHA-MCL = 2.0 POP RUN-PT 4.07
RUN 4 ALPHA-FAR = 2.0 Q-COMP = .32329
POINT 5 SIGMA = -.45 V-REF = 199.45
COMPUTED FREQUENCY = 19.14, K = .1508

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PEP, RADIAN ***

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	-11.287	10.807	-4.342	2.716	-2.684	.781	-1.907	-.281	-1.623	-1.170	-1.320	-1.984
2	2	-2.759	-.336	.127	-.067	.181	-.051	.144	-.026	.097	-.014	.035	.085
3	3	-.037	-.112	.020	-.023	.028	.024	.010	-.038	.006	.036	.051	.065
4	4	.004	.039	.024	-.019	.012	-.071	-.019	-.056	.022	.006	.010	-.019
5	5	.004	.039	.024	-.019	.012	-.071	-.019	-.056	.022	.006	.010	-.019
6	6	.004	.039	.024	-.019	.012	-.071	-.019	-.056	.022	.006	.010	-.019
7	7	.004	.039	.024	-.019	.012	-.071	-.019	-.056	.022	.006	.010	-.019
8	8	.004	.039	.024	-.019	.012	-.071	-.019	-.056	.022	.006	.010	-.019
9	9	.004	.039	.024	-.019	.012	-.071	-.019	-.056	.022	.006	.010	-.019
10	10	.004	.039	.024	-.019	.012	-.071	-.019	-.056	.022	.006	.010	-.019

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	-761	-2.298	-435	-2.019	-.411	-1.757	6.572	-8.234	2.901	-5.454	1.768	-2.701
2	2	.038	.022	.067	-.004	.043	.015	.071	-.053	-.003	.778	-.024	-.014
3	3	.012	.022	.010	-.004	.018	-.010	.027	-.060	.117	.155	.002	-.026
4	4	.016	.022	.021	-.013	.008	-.017	-.016	-.046	.026	.013	.011	-.019
5	5	.007	.008	.006	-.018	.012	-.017	-.016	-.041	.015	-.012	.011	-.019
6	6	.003	.003	.002	-.007	.001	-.003	-.001	-.008	.003	-.002	.003	-.005
7	7	.002	.002	.001	-.003	.001	-.001	-.001	-.001	.001	-.001	.001	-.001
8	8	.002	.002	.001	-.003	.001	-.001	-.001	-.001	.001	-.001	.001	-.001
9	9	.002	.002	.001	-.003	.001	-.001	-.001	-.001	.001	-.001	.001	-.001
10	10	.002	.002	.001	-.003	.001	-.001	-.001	-.001	.001	-.001	.001	-.001

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	530	-1.144	186	-.995	.219	-.540	169	-.680	.925	-.975	.158	-.974
2	2	.079	.004	.079	-.019	.097	-.120	.011	-.049	.023	.058	.097	-.023
3	3	.019	.007	.011	-.015	.047	-.016	.047	-.024	.068	.045	.072	-.014
4	4	.010	.004	.022	-.001	.005	-.012	.019	-.018	.002	.002	.021	-.004
5	5	.026	.015	.031	-.026	.005	-.012	-.031	-.050	.011	-.012	.012	-.012
6	6	.013	.012	.015	-.014	.005	-.003	.006	-.016	.008	.005	.026	-.024
7	7	.020	.012	.017	-.017	.005	-.003	.005	-.024	.008	.005	.026	-.024
8	8	.020	.012	.017	-.017	.005	-.003	.005	-.024	.008	.005	.026	-.024
9	9	.020	.012	.017	-.017	.005	-.003	.005	-.024	.008	.005	.026	-.024
10	10	.020	.012	.017	-.017	.005	-.003	.005	-.024	.008	.005	.026	-.024

OCNT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 11 ALPHA-MCL = 2.0 PDP RUN.PT 4.07
 RUN 4 ALPHA-BAR = 2.0 Q-COMP = .32329
 POINT 5 ALPHA-SIGMA = -.45 V-REF = 199.45
 COMPUED FREQUENCY = 19.14, K = .1508
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	15	.627	136.25	5.121	147.97	2.796	163.77	1.927	186.39	2.600	215.79	2.422	234.98
2	15	.780	173.06	5.144	132.05	1.888	144.10	1.166	149.88	.098	351.67	.082	67.49
3	1	.112	211.28	5.158	20.51	.095	147.42	.030	18.80	.037	80.98	.029	52.14
4	3	.318	263.27	.030	311.02	.072	260.79	.059	351.04	.023	15.32	.013	306.85
5	6	.407	89.07	.030	321.02	.063	297.08	.023	15.32	.049	14.94	.027	297.07
6	7	.200	152.32	.027	240.41	.037	234.56	.045	194.05	.087	250.13	.066	240.75
7	8	.066	100.20	.027	178.32	.037	175.19	.036	154.05	.019	150.43	.020	158.52
8	9	.139	68.48	.023	144.66	.035	165.62	.035	119.36	.061	177.09	.048	165.13
9	10	.237	115.48	.055	158.10	.054	158.66	.039	192.20	.086	204.12	.062	207.28

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	.421	251.69	2.076	256.50	1.804	256.85	10.536	308.60	6.178	298.01	3.228	303.21
2	3	.104	68.80	.058	49.32	.045	19.44	.067	166.83	.778	90.21	.028	309.84
3	4	.012	17.28	.076	26.95	.077	12.81	.089	323.58	.200	129.19	.067	336.94
4	5	.024	303.80	.010	338.06	.020	329.92	.065	65.73	.188	314.00	.025	50.37
5	6	.024	303.80	.027	321.19	.019	296.80	.049	250.74	.037	334.12	.018	309.57
6	7	.015	348.18	.019	287.86	.017	277.42	.054	49.89	.039	321.52	.021	342.37
7	8	.045	197.97	.011	142.35	.017	165.25	.046	232.76	.019	324.84	.035	347.10
8	9	.051	272.39	.038	233.22	.028	219.32	.091	189.14	.064	317.25	.074	352.10
9	10			.040	293.70	.036	282.89	.081	306.52	.046	338.66	.074	352.10

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	.261	238.48	1.067	291.22	.584	292.08	.700	293.93	.987	279.19	.987	279.19
2	3	.057	338.03	.124	324.75	.137	308.87	.074	277.07	.100	246.62	.100	246.62
3	4	.020	338.03	.144	306.08	.042	347.92	.048	18.87	.081	11.02	.073	11.02
4	5	.010	338.03	.044	306.08	.005	157.66	.037	347.04	.020	349.61	.021	349.61
5	6	.030	338.03	.044	306.08	.013	157.66	.059	317.29	.043	235.10	.043	235.10
6	7	.018	338.03	.044	306.08	.017	291.42	.030	337.71	.043	235.10	.043	235.10
7	8	.036	338.03	.044	306.08	.002	71.76	.017	85.18	.025	109.21	.025	109.21
8	9	.036	338.03	.044	306.08	.019	215.40	.017	68.69	.008	126.87	.008	126.87
9	10	.036	338.03	.044	306.08	.021	270.60	.023	301.23	.029	251.43	.029	251.43
10				.025	244.72	.021	230.63	.013	95.23	.026	183.11	.026	183.11

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OF POOR QUALITY

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11 ALPHA-WCL = 2.0 POP RUN.PT 4.07
4 ALPHA-RAR = 2.0 O-COMP = .32325
5 ALPHA-SIGMA = -.45 V-DEF = .199.45
COMPUTED FREQUENCY = 19.14, K = .1508

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 19.147 HZ

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	012		062		148		261		392		530		661										
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP									
1	12	859	-19	041	-8	170	4	453	-3	482	2	983	-1	603	2	153	1	777	-989	1	274	1	878
2	12	012	-	525	1	335	-	305	-	038	-	107	-	019	-	019	-	059	-	069	-	254	
3	1	022	-	371	1	00	-	275	-	090	-	033	-	003	-	051	-	025	-	026	-	004	
4	-	064	-	360	-	198	-	027	-	043	-	048	-	004	-	003	-	013	-	004	-	027	
5	-	431	-	350	-	076	-	028	-	036	-	004	-	007	-	037	-	017	-	008	-	000	
6	-	431	-	350	-	057	-	028	-	008	-	049	-	005	-	008	-	035	-	000	-	000	
7	-	552	-	386	-	039	-	073	-	023	-	026	-	006	-	012	-	020	-	025	-	000	
8	-	150	-	144	-	052	-	003	-	069	-	009	-	014	-	041	-	046	-	002	-	004	
9	-	150	-	179	-	037	-	123	-	030	-	090	-	012	-	107	-	033	-	042	-	000	
0	-	150	-	279	-	037	-	123	-	030	-	090	-	012	-	107	-	033	-	042	-	000	

X = 774		PC2		910							
N	DELCPR	DELCP	DELCP	DELCP	DELCP	N	CNREAL	CNIMAG	N	CNREAL	CNIMAG
1	926	582	1.544	568	782	1	2.737	-1.039	1	674	-838
2	925	-0.010	1.514	555	782	2	.036	-.009	2	.073	.032
3	912	0.016	1.505	507	782	3	.037	-.004	3	.006	.010
4	904	-0.021	1.494	503	782	4	.037	-.023	4	.006	.007
5	897	0.021	1.490	514	782	5	.014	-.009	5	.010	-.005
6	898	-0.013	1.440	511	782	6	.027	.008	6	.006	-.005
7	897	0.011	1.431	506	782	7	.023	.009	7	.008	.008
8	917	-0.041	1.423	520	782	8	.016	-.009	8	.005	-.009
9	904	0.042	1.435	537	782	9	.056	-.034	9	.015	.010
10	903	-0.042	1.435	537	782	10	.056	-.034	10	.015	.010

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*** WALL PRESSURES, PFR RADIAN ***
WALL NO.      W1      W2      W3      W4      W6      W10
GAS FRACTION  CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG
          * XI = .8382 *
*** STABILITY PARAMETER ***

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[illegible]

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 11 ALPHA-MCL = 2.0 POP RUN.PI 4.07
RUN 4 ALPHA-BAR = 2.0 Q-COMP = .32329
POINT 5 SIGMA = -.45 V-REF = .199.45
COMPUTED FREQUENCY = 19.14. K = .1508
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	N	.062			.198			.261			.392			.530			.661		
		DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	26.106	313.17	10.918	311.56	5.652	321.97	3.386	331.75	2.153	337.56	2.033	29.10	2.269	29.10	2.269	29.10	2.269	29.10	2.269
2	1.019	355.42	.855	48.72	.208	169.58	.107	185.59	.035	237.63	.035	237.63	.035	237.63	.035	237.63	.035	237.63	.035
3	1.149	27.19	.292	159.98	.058	239.10	.040	324.60	.014	321.60	.014	321.60	.014	321.60	.014	321.60	.014	321.60	.014
4	1.377	80.20	.138	314.50	.046	112.32	.029	118.35	.071	208.34	.071	208.34	.071	208.34	.071	208.34	.071	208.34	.071
5	1.365	266.83	.007	65.98	.045	51.87	.029	354.76	.028	354.22	.028	354.22	.028	354.22	.028	354.22	.028	354.22	.028
6	1.414	351.44	.059	74.60	.053	351.21	.049	354.76	.028	354.22	.028	354.22	.028	354.22	.028	354.22	.028	354.22	.028
7	1.228	315.09	.040	266.38	.030	17.17	.030	31.54	.035	318.07	.035	318.07	.035	318.07	.035	318.07	.035	318.07	.035
8	1.011	301.36	.061	238.03	.069	267.21	.075	263.39	.118	25.50	.118	25.50	.118	25.50	.118	25.50	.118	25.50	.118
9	1.011	225.79	.101	338.31	.127	346.44	.091												
10	1.117	298.29																	

X =	.774			.860			.910			N	CN-MAG		PHIN	N	CN-MAG		PHIN
	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH		PHI						
1	1.866	60.14	1.194	60.95	.967	54.01	.967	54.01	1	2.927	339.22	1	1.076	308.80	1	1.076	308.80
2	.055	241.32	.021	136.30	.067	325.28	.067	325.28	2	.028	339.57	2	.012	65.02	2	.012	65.02
3	.003	108.74	.011	189.03	.028	284.46	.028	284.46	3	.009	352.08	3	.005	55.79	3	.005	55.79
4	.037	340.31	.012	27.60	.007	60.09	.007	60.09	4	.007	73.21	4	.005	58.30	4	.005	58.30
5	.036	54.78	.007	147.56	.006	55.55	.006	55.55	5	.017	182.12	5	.011	25.83	5	.011	25.83
6	.041	67.83	.029	221.58	.032	245.19	.032	245.19	6	.025	31.60	6	.005	71.13	6	.005	71.13
7	.041	84.48	.042	107.79	.047	104.49	.047	104.49	7	.038	21.30	7	.018	356.79	7	.018	356.79
8	.056	348.43	.001	303.44	.007	34.12	.007	34.12	8	.060	29.10	8	.018	323.54	8	.018	323.54
9			.055	140.22	.023	32.06	.023	32.06	9			9	.018	323.54	9	.018	323.54
10					.049	137.92	.049	137.92	10			10			10		

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	N	W1			W2			W3			W4			W5			W6			W7			W8			W9			W10		
		CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH	CP-MAG	PHI	DELCPH
1	1.943	263.69	2.020	283.22	.991	3.33	.370	280.40	.023	17.42	.065	262.72	.091	206.75	.038	205.18	.014	251.32	.027	199.81											
2	.108	39.42	.131	5.11	.024	316.67	.073	104.44	.019	287.98	.034	156.85	.013	239.89																	
3	.024	316.67	.073	104.44	.019	287.98	.034	156.85	.013	239.89																					
4	.073	104.44	.019	287.98	.034	156.85	.013	239.89																							
5	.019	287.98	.034	156.85	.013	239.89																									
6	.034	156.85	.013	239.89																											
7	.013	239.89																													
8																															
9																															
10																															

*** STABILITY PARAMETE

* XI = .0382

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTR BLADE DATA, WALL STATIONS

FILE 136 ALPHA-WCL = 2.0 POP RUN PT 2.05
RUN 2 ALPHA-PAR = 2.0 O-COMP = 31962
POINT 1 SIGMA = 0. V-REF = 198.28
COMPUTED FREQUENCY = 9.14, K = .0724

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PEP RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	12	231	2133	622	115	151	713	1.422
2	3	401	1634	009	108	079	062	078
3	4	804	535	044	051	082	062	104
4	5	417	458	050	091	128	018	055
5	6	221	195	001	042	038	024	017
6	7	037	100	002	003	008	029	010
7	8	021	003	002	015	042	045	022
8	9	017	017	007	007	021	001	050
9	10	009	015	004	017	035	001	009
10								002
X	N	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	12	606	539	517	819	1.968	2.922	2.324
2	3	073	1622	170	148	669	079	104
3	4	108	055	067	184	098	110	101
4	5	082	102	098	074	179	047	055
5	6	009	013	014	050	063	012	008
6	7	122	013	009	156	023	015	012
7	8	051	006	007	049	076	030	001
8	9	005	001	008	019	022	002	015
9	10	002	006	008	028	047	007	004
10								001
X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG	
1	12	673	1.871	1.702	1.547	1.463	1.380	
2	3	116	162	179	113	112	108	
3	4	092	103	102	049	056	064	
4	5	108	129	101	008	006	004	
5	6	019	003	001	133	122	111	
6	7	003	002	001	032	031	037	
7	8	009	002	001	004	004	007	
8	9	001	001	001	010	010	011	
9	10	001	001	001	008	009	007	
10								

MODE 1 -- CENTER PERIODICITY TEST
OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 186 ALPHA-MCL = 2.0 PDP RUN.PI 2.05
 RUN 2 ALPHA-BAR = 2.0 Q-COMP = .31962
 POINT 1 SIGMA = 0. V-REF = 198.28
 COMPUTED FREQUENCY = 9.14, K = .0724

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP	-012-UPPER MAG	PHI	-062-UPPER CP	PHI	-148-UPPER CP	PHI	-261-UPPER CP	PHI	-392-UPPER CP	PHI	-510-UPPER CP	PHI	-661-UPPER CP	PHI
1	12	.415	170.11	4.616	172.26	2.331	177.16	1.110	187.80	389	245.49	.894	322.91	1.548	336.75	
2	1	.702	256.17	.164	3.03	.227	28.52	.191	24.26	.154	359.58	.128	319.12	.165	298.34	
3	1	.033	328.83	.078	214.38	.103	202.40	.097	238.26	.139	261.49	.151	245.68	.126	214.15	
4	5	.619	138.67	.066	48.56	.109	56.90	.168	49.41	.148	48.45	.095	72.86	.017	191.46	
5	5	.294	209.85	.021	179.18	.059	134.58	.053	134.25	.040	256.18	.132	236.50	.017	191.46	
6	5	.043	209.85	.079	174.57	.123	181.61	.084	174.50	.068	176.51	.132	169.18	.111	173.47	
7	102	.78	102.77	.017	353.82	.021	323.54	.045	287.95	.012	321.39	.024	337.15	.022	329.44	
8	9	.131	159.77	.030	320.82	.033	303.31	.022	287.95	.075	323.32	.010	.049	.058	309.37	
9	136	275.11	.018	338.54	.021	274.97	.006	107.06	.010	39.31	.030	.046	89.20	.051	192.70	
10	.018	119.09	.052	119.27	.037	83.99	.059	107.06	.059	107.06	.030	.046	89.20	.051	192.70	

X =	N	CP	-774-UPPER MAG	PHI	CP	-860-UPPER MAG	PHI	CP	-910-UPPER MAG	PHI	CP	-012-LOWER MAG	PHI	CP	-062-LOWER MAG	PHI	CP	-148-LOWER MAG	PHI	CP	-261-LOWER MAG	PHI
1	1	1	.694	341.45	1	.834	343.59	1	1.705	344.72	9	.036	347.42	5	.880	341.36	2	.980	349.62	2	.360	350.07
2	1	1	.180	296.03	1	.119	214.22	1	.137	216.79	9	.685	208.05	5	.968	210.93	2	.202	221.74	2	.192	224.79
3	1	1	.121	206.81	1	.126	50.98	1	.193	56.55	9	.209	67.50	5	.286	116.80	2	.148	69.40	2	.128	64.74
4	5	1	.130	252.06	1	.022	220.41	1	.044	233.58	9	.193	106.52	5	.287	174.26	2	.137	69.65	2	.019	64.74
5	5	1	.123	173.87	1	.118	173.56	1	.120	173.38	9	.158	171.74	5	.189	174.26	2	.130	175.56	2	.126	179.77
6	5	1	.022	16.96	1	.041	4.08	1	.036	1.28	9	.013	50.08	5	.045	355.33	2	.015	358.00	2	.012	305.34
7	3	1	.051	352.17	1	.050	339.79	1	.048	334.20	9	.090	302.89	5	.066	263.67	2	.053	304.40	2	.045	309.37
8	5	1	.006	10.36	1	.015	148.44	1	.014	159.80	9	.029	131.88	5	.017	97.78	2	.007	110.25	2	.008	118.48
9	5	1	.037	92.98	1	.048	194.19	1	.049	192.87	9	.035	159.65	5	.017	97.78	2	.007	110.25	2	.008	118.48

X	N	.392-LOWER CP-MAG	PHI	.530-LOWER CP-MAG	PHI	.661-LOWER CP-MAG	PHI	.774-LOWER CP-MAG	PHI	.860-LOWER CP-MAG	PHI	.910-LOWER CP-MAG	PHI
1	1	.90	354.89	.90	354.28	1.303	357.59	1.556	354.00	1.476	352.43	1.398	350.67
2	1	.173	222.12	.173	218.44	.126	219.59	.219	226.18	.191	226.04	.164	217.20
3	1	.127	62.12	.148	60.70	.143	64.99	.163	64.94	.153	62.38	.144	60.10
4	5	.020	284.73	.136	269.08	.004	285.60	.018	244.94	.014	244.80	.010	244.80
5	5	.120	278.56	.127	277.72	.104	285.60	.134	275.38	.122	276.99	.111	275.38
6	5	.022	338.75	.027	327.72	.022	348.69	.036	352.18	.036	350.62	.039	349.21
7	5	.036	320.25	.047	326.65	.045	312.34	.033	352.32	.016	350.91	.039	349.21
8	5	.004	168.91	.023	182.65	.015	172.34	.010	187.80	.011	170.91	.012	156.14
9	5	.031	98.76	.041	199.03	.030	117.21	.048	199.37	.044	102.46	.040	100.21
10													

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 186 ALPHA-MCL = 2.0 PDP RUN-PT 2.05
RUN 2 ALPHA-PAR = 2.0 Q-COMP = .31962
POINT 1 SIGMA = 0. V-REF = 198.28
COMPUTED FREQUENCY = 9.14, K = .0724

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X = .012	.062	.148	.261	.392	.536	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	21.050	-4.101	10.142	-2.511	5.250	-1.120
2	-1.053	.436	-.010	-.015	-.012	-.018
3	.343	-.279	.177	-.046	-.054	-.045
4	-.119	.044	-.049	.011	-.006	-.003
5	-.013	-.044	-.028	-.003	-.000	-.001
6	-.178	-.099	-.031	-.022	-.012	-.006
7	-.031	.137	-.019	-.007	-.002	-.001
8	.036	-.032	.019	.003	.001	.001
9						
10						

X = .774	.860	.910	.950	.985	1.000	1.015
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	-.059	.376	-.292	.265	.221	.194
2	-.034	-.024	-.015	-.004	-.001	-.001
3	-.034	.012	-.011	.005	.005	.003
4	-.001	.002	.001	.001	.001	.001
5	-.005	.008	.005	.003	.002	.001
6	-.019	.002	.002	.001	.001	.001
7	-.016	.002	.002	.001	.001	.001
8	-.006	.001	.001	.001	.001	.001
9						
10						

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W10	W125	
GAP FRACTION	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	528	-.478	.648	-.660	.466	-.660	.466	-.660	.466
2	128	-.018	.242	-.010	.058	-.104	.095	-.329	.352
3	106	-.119	.173	-.182	.170	-.056	-.024	-.335	.140
4	.059	-.119	.358	.161	.100	-.132	.096	-.005	.026
5	.002	-.003	.002	-.032	.025	-.017	.007	-.002	.013
6	.132	-.119	.168	-.036	.107	-.124	.045	-.013	.013
7	.012	.013	.022	.025	.039	.030	.025	-.037	.005
8	.025	-.048	.108	-.028	.035	.029	.037	-.001	.062
9	.022	-.010	.018	.037	.010	-.003	.029	-.029	.065
10	.003	.054	.044	.077	.028	-.019	-.062		

*** STABILITY PARAMETER ***

* XI = .2055 *

ORIGINAL FILED IN
OF POOR QUALITY

MODE 1 -- CENTER PERIODICITY TEST
OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 186 ALPHA-MCL = 2.0 PDP RUN-PT 2.05
RUN 182 ALPHA-BAR = 2.0 Q-COMP = 31962
POINT 1 SIGMA = 0. V-REF = 198.28
COMPUTED FREQUENCY = 9.14, K = .0724

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	.012		.062		.148		.261		.392		.510		.661	
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	21.445	348.98	10.449	346.09	5.297	352.37	3.434	355.72	1.838	360	1.210	16.91	.569	102.17
2	1.218	75.69	1.116	246.33	.216	247.85	.260	254.26	.131	254.71	.104	111.25	.133	23.77
3	1.253	157.13	1.479	268.79	.061	255.96	.053	199.85	.088	143.77	.076	152.45	.077	117.12
4	.477	219.13	.269	130.01	.037	109.43	.056	192.25	.041	183.23	.059	140.79	.047	351.68
5	.377	315.90	.104	130.94	.085	309.34	.071	192.02	.024	152.99	.022	37.33	.018	359.11
6	.127	159.76	.110	174.04	.011	113.40	.043	19.05	.046	181.62	.027	272.94	.042	282.44
7	.090	261.89	.028	356.23	.011	107.23	.046	270.80	.031	151.55	.020	268.72	.006	285.39
8	.020	330.88	.056	236.40	.020	306.12	.026	321.60	.039	146.35	.039	226.99	.019	150.39
9	.060	101.34	.021	106.28	.028	98.74	.014	119.80	.013	208.35	.024	185.27	.003	121.30
10	.048	41.32	.019	1.58	.004	39.37	.027	311.80	.002	156.88	.009	120.91	.027	244.98

N	.774		.860		.910		CM-MAG		PHIM	
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	CM-MAG	PHIM	CM-MAG	PHIM
1	28.1	93.84	.435	132.13	.349	139.92	2.656	355.81	.974	347.81
2	.064	327.86	.024	247.54	.029	133.01	.104	355.52	.020	210.36
3	.034	266.08	.039	247.76	.008	237.01	.067	198.84	.013	203.22
4	.012	177.04	.025	156.14	.008	163.72	.032	156.99	.014	168.57
5	.011	191.19	.011	7.84	.007	7.84	.024	124.08	.008	106.10
6	.009	301.12	.008	236.35	.015	306.81	.014	199.64	.002	159.13
7	.019	171.91	.017	220.35	.010	275.15	.007	280.87	.002	295.21
8	.018	188.70	.017	135.69	.015	110.11	.007	241.15	.006	310.54
9	.012	118.73	.006	289.59	.002	230.59	.013	238.69	.003	98.16
10							.005	277.41		15.12

*** STABILITY PARAMETE

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	W1		W2		W3		W4		W5		W6		W7		W8		W9		W10	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	.743	317.85	.925	314.50	5.798	175.39	.719	203.46	.456	175.76	.511	280.71	.336	255.96	.170	55.63	.029	148.89	.131	181.05
2	.129	352.11	.242	2.39	.932	319.61	.118	331.60	.108	211.26	.156	154.69	.124	177.34	.031	344.89	.047	303.89	.014	68.32
3	.160	228.23	.171	226.47	.223	49.33	.154	154.69	.156	154.69	.156	154.69	.156	154.69	.156	154.69	.156	154.69	.156	154.69
4	.151	67.18	.171	226.47	.223	49.33	.154	154.69	.156	154.69	.156	154.69	.156	154.69	.156	154.69	.156	154.69	.156	154.69
5	.103	308.36	.138	302.20	.100	146.96	.124	177.34	.124	177.34	.124	177.34	.124	177.34	.124	177.34	.124	177.34	.124	177.34
6	.171	171.79	.138	181.98	.100	146.96	.124	177.34	.124	177.34	.124	177.34	.124	177.34	.124	177.34	.124	177.34	.124	177.34
7	.018	146.79	.034	48.15	.031	337.36	.031	344.89	.031	344.89	.031	344.89	.031	344.89	.031	344.89	.031	344.89	.031	344.89
8	.036	299.99	.030	285.67	.044	322.16	.044	307.42	.047	307.42	.047	307.42	.047	307.42	.047	307.42	.047	307.42	.047	307.42
9	.025	204.18	.041	115.67	.012	326.57	.012	343.37	.014	68.32	.014	68.32	.014	68.32	.014	68.32	.014	68.32	.014	68.32
10	.064	87.48	.089	60.30	.071	113.48	.071	107.15	.064	107.15	.064	107.15	.064	107.15	.064	107.15	.064	107.15	.064	107.15

X	N	= .392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	2	1.098	1.644	1.137	1.365	1.457	1.158
1	3	1.047	1.042	1.004	1.092	1.074	1.068
1	4	1.049	1.056	1.064	1.041	1.041	1.027
1	5	1.055	1.041	1.061	1.036	1.037	1.036
1	6	1.040	1.050	1.083	1.051	1.039	1.049
1	7	1.034	1.053	1.042	1.044	1.037	1.034
1	8	1.019	1.017	1.023	1.028	1.037	1.027
1	9	1.023	1.032	1.009	1.023	1.030	1.044
1	10	1.016	1.025	1.016	1.018	1.014	1.016
1	20	1.012	1.010	1.010	1.024	1.026	1.020
1	30	1.012	1.010	1.010	1.024	1.026	1.020
1	40	1.012	1.010	1.010	1.024	1.026	1.020
1	50	1.012	1.010	1.010	1.024	1.026	1.020
1	60	1.012	1.010	1.010	1.024	1.026	1.020
1	70	1.012	1.010	1.010	1.024	1.026	1.020
1	80	1.012	1.010	1.010	1.024	1.026	1.020
1	90	1.012	1.010	1.010	1.024	1.026	1.020
1	100	1.012	1.010	1.010	1.024	1.026	1.020

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 168 ALPHA-MCL = 2.0 PDR RUN-PT 2.08
RUN 3 ALPHA-BAR = 2.0 O-COMP = 31980
POINT 3 SIGMA = 0. V-REF = 196.33
COMPUTED FREQUENCY = 15.50, K = .1228
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP	012-UPPER PHI	062-UPPER CP-MAG	148-UPPER CP-MAG	261-UPPER CP-MAG	392-UPPER CP-MAG	510-UPPER CP-MAG	661-UPPER CP-MAG	UPPER PHI					
1	10	783	172.35	350	181.08	2.321	196.51	1.446	223.10	1.259	260.47	1.573	293.68	1.963	312.68
2	3	872	237.96	193	136.56	.071	85.38	.283	27.41	.214	101.71	.176	132.19	.170	151.00
3	4	632	334.69	193	136.56	.071	85.38	.283	27.41	.214	101.71	.176	132.19	.170	151.00
4	5	422	32.47	090	317.24	.048	306.68	.090	27.93	.096	352.20	.005	317.72	.052	40.40
5	6	279	95.86	090	317.24	.048	306.68	.090	27.93	.096	352.20	.005	317.72	.052	40.40
6	7	157	249.92	101	319.26	.057	298.48	.052	58.71	.122	321.30	.044	327.20	.080	48.67
7	8	037	325.89	034	136.18	.045	204.57	.036	148.50	.039	171.00	.044	327.20	.080	48.67
8	9	077	324.51	034	136.18	.045	204.57	.036	148.50	.039	171.00	.044	327.20	.080	48.67
9	10	036	357.66	017	29.34	.058	8.71	.049	177.13	.020	206.09	.057	205.34	.050	178.72
10		041	261.66	005	63.11	.011	132.30	.007	338.68	.007	29.87	.015	18.00	.027	350.73

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	074	319.52	2	041	155.03	1	877	323.96	8	790	341.26	5	812	330.12
2	3	148	161.28	0	117	358.09	1	102	123.01	8	450	231.16	5	851	167.29
3	4	048	48.47	0	029	350.39	0	035	341.11	0	028	247.56	0	347	251.29
4	5	073	55.02	0	081	350.51	0	074	50.63	0	049	14.19	0	119	85.38
5	6	074	323.51	0	073	324.36	0	058	314.38	0	053	357.09	0	065	316.62
6	7	079	183.73	0	074	184.82	0	058	177.51	0	083	185.09	0	058	203.57
7	8	049	28.35	0	058	35.64	0	057	27.90	0	085	31.34	0	059	55.27
8	9	042	219.26	0	047	224.89	0	028	212.01	0	066	197.82	0	021	208.23
9	10	026	219.26	0	047	224.89	0	028	212.01	0	072	209.34	0	024	204.60

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	1.647	335.48	1.784	337.14	1.224	338.56	1.513	334.44	1.596	335.52	1.399	336.20	1.099	337.06
2	2	.083	125.81	.046	126.03	.074	48.20	.102	154.93	.090	148.52	.028	132.01	.029	132.16
3	3	.045	345.29	.059	342.94	.096	329.26	.044	337.06	.041	320.54	.039	331.64	.076	337.47
4	4	.059	336.90	.087	341.14	.071	323.31	.077	40.75	.072	311.21	.076	350.64	.034	348.49
5	5	.039	312.07	.039	311.06	.088	298.52	.067	310.75	.039	165.89	.034	188.49	.051	158.19
6	6	.030	162.07	.064	181.06	.025	279.71	.028	171.83	.057	157.56	.051	158.19	.027	158.45
7	7	.028	216.35	.032	235.38	.034	62.35	.027	224.61	.030	231.16	.027	250.24	.027	250.24

ORIGINAL PAGE IS
OF POOR QUALITY

OCWI PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILF 188 ALPHA-MCL = 2.0 PDP RUN.PI 2.08
RUN 2 ALPHA-RAR = 2.0 Q-COMP = .31980
POINT 3 SIGMA = 0. V-DEF = 198.33
COMPUTED FREQUENCY = 15.50, K = .1228

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	19.011	-4.263	9.388	-2.613	4.949	-530	-3.188
2	185	385	-177	-0.04	-122	-263	-0.99
3	583	244	-178	-0.369	-0.13	-0.72	-0.08
4	372	-277	-0.33	-159	-0.05	-0.30	-0.47
5	111	159	-0.37	-0.63	-0.05	-0.03	-0.05
6	113	139	-0.48	-0.55	-0.07	-0.16	-0.08
7	116	119	-0.48	-0.61	-0.26	-0.50	-0.24
8	199	-0.19	-0.68	-0.32	-0.22	-0.41	-0.09
9	199	-0.19	-0.68	-0.32	-0.22	-0.41	-0.09
10	199	-0.19	-0.68	-0.32	-0.22	-0.41	-0.09

X =	.774	.860	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	213	694	-343
2	48	-0.05	-0.13
3	009	-0.03	-0.05
4	017	-0.03	-0.00
5	016	-0.07	-0.00
6	021	-0.06	-0.09
7	033	-0.06	-0.06
8	014	-0.07	-0.23
9	003	-0.03	-0.16
10	003	-0.03	-0.16

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	N	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	407	-1.519	383	-1.738	-5.393
2	134	262	046	345	-222
3	066	000	000	109	293
4	057	-0.32	065	-0.33	109
5	093	046	084	009	141
6	076	-0.71	068	-0.21	015
7	064	021	048	012	-0.09
8	554	046	050	045	005
9	217	011	023	006	-0.06
10	011	-0.17	014	007	021

*** STABILITY PARAMETER

* XI = .2266 *

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 188 ALPHA-MCL = 2.0 POP RUN-PT 31800
RUN 2 ALPHA-PAR = 2.0 O-COMP = 21800
POINT 3 SIGMA = 0.0 V-REF = 198.33
COMPUTED FREQUENCY = 15.50, K = .1228

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPM	.012	PHI	DELCPM	.062	PHI	DELCPM	.148	PHI	DELCPM	.261	PHI	DELCPM	.392	PHI	DELCPM	.530	PHI	DELCPM	.661	PHI
1	19	.483	347.32	9.800	343.32	.776	140.31	.490	353.89	3.188	246.52	.513	1.796	18.11	1.258	318.74	1.015	318.74	1.015	318.74	1.015	318.74
2	2	.432	157.26	.410	244.31	.776	140.31	.490	353.89	3.188	246.52	.513	1.796	18.11	1.258	318.74	1.015	318.74	1.015	318.74	1.015	318.74
3	3	.375	214.80	.162	101.84	.083	227.45	.033	63.50	.026	252.52	.522	.073	118.27	.072	347.89	.045	347.89	.045	347.89	.045	347.89
4	4	.286	284.56	.085	227.45	.083	227.45	.031	257.55	.067	192.22	.006	.015	80.65	.029	33.87	.029	33.87	.029	33.87	.029	33.87
5	5	.178	51.45	.095	113.21	.073	228.86	.031	113.30	.064	266.06	.006	.007	159.66	.027	270.48	.041	270.48	.041	270.48	.041	270.48
6	6	.118	173.35	.073	228.86	.065	68.01	.057	117.65	.021	248.65	.006	.007	306.10	.010	4.47	.037	4.47	.037	4.47	.037	4.47
7	7	.101	350.67	.065	205.21	.021	94.31	.046	242.11	.016	286.11	.006	.033	77.59	.030	263.42	.044	263.42	.044	263.42	.044	263.42
8	8	.025	30.93	.021	203.43	.019	11.02	.019	11.02	.024	10.91	.006	.013	40.02	.008	41.49	.030	41.49	.030	41.49	.030	41.49
9	9																					
10	10																					

X	N	DELCPM	.774	PHI	DELCPM	.860	PHI	DELCPM	.910	PHI	DELCPM	N	CM-MAG	PHIN	N	CM-MAG	PHIN
1	1	.726	107.05	.593	107.41	.593	107.41	.593	130.10	.593	130.10	1	.412	1.75	1	.412	1.75
2	2	.049	354.76	.029	288.75	.029	288.75	.029	230.25	.029	230.25	2	.033	202.12	2	.033	202.12
3	3	.019	208.13	.022	278.00	.022	278.00	.022	279.67	.022	279.67	3	.033	189.93	3	.033	189.93
4	4	.017	343.71	.011	235.78	.011	235.78	.011	93.67	.011	93.67	4	.021	282.51	4	.021	282.51
5	5	.017	203.95	.014	227.08	.014	227.08	.014	298.86	.014	298.86	5	.008	153.03	5	.008	153.03
6	6	.022	15.65	.017	66.16	.017	66.16	.017	325.06	.017	325.06	6	.033	111.75	6	.033	111.75
7	7	.051	131.32	.022	139.93	.022	139.93	.022	143.69	.022	143.69	7	.016	251.85	7	.016	251.85
8	8	.015	21.59	.009	95.92	.009	95.92	.009	130.16	.009	130.16	8	.011	251.85	8	.011	251.85
9	9	.004	314.63	.006	95.92	.006	95.92	.006	128.16	.006	128.16	9	.011	251.85	9	.011	251.85
10	10											10			10		

*** STABILITY PARAMETE

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	W1 --.125	W2 .000	W3 CP-MAG	PHI	W4 CP-MAG	PHI	W5 CP-MAG	PHI	W6 CP-MAG	PHI	W7 CP-MAG	PHI	W8 CP-MAG	PHI	W9 CP-MAG	PHI	W10 CP-MAG	PHI	W11 CP-MAG	PHI	W12 CP-MAG	PHI	W13 CP-MAG	PHI	W14 CP-MAG	PHI	W15 CP-MAG	PHI	W16 CP-MAG	PHI	W17 CP-MAG	PHI	W18 CP-MAG	PHI	W19 CP-MAG	PHI	W20 CP-MAG	PHI	W21 CP-MAG	PHI	W22 CP-MAG	PHI	W23 CP-MAG	PHI	W24 CP-MAG	PHI	W25 CP-MAG	PHI	W26 CP-MAG	PHI	W27 CP-MAG	PHI	W28 CP-MAG	PHI	W29 CP-MAG	PHI	W30 CP-MAG	PHI	W31 CP-MAG	PHI	W32 CP-MAG	PHI	W33 CP-MAG	PHI	W34 CP-MAG	PHI	W35 CP-MAG	PHI	W36 CP-MAG	PHI	W37 CP-MAG	PHI	W38 CP-MAG	PHI	W39 CP-MAG	PHI	W40 CP-MAG	PHI	W41 CP-MAG	PHI	W42 CP-MAG	PHI	W43 CP-MAG	PHI	W44 CP-MAG	PHI	W45 CP-MAG	PHI	W46 CP-MAG	PHI	W47 CP-MAG	PHI	W48 CP-MAG	PHI	W49 CP-MAG	PHI	W50 CP-MAG	PHI	W51 CP-MAG	PHI	W52 CP-MAG	PHI	W53 CP-MAG	PHI	W54 CP-MAG	PHI	W55 CP-MAG	PHI	W56 CP-MAG	PHI	W57 CP-MAG	PHI	W58 CP-MAG	PHI	W59 CP-MAG	PHI	W60 CP-MAG	PHI	W61 CP-MAG	PHI	W62 CP-MAG	PHI	W63 CP-MAG	PHI	W64 CP-MAG	PHI	W65 CP-MAG	PHI	W66 CP-MAG	PHI	W67 CP-MAG	PHI	W68 CP-MAG	PHI	W69 CP-MAG	PHI	W70 CP-MAG	PHI	W71 CP-MAG	PHI	W72 CP-MAG	PHI	W73 CP-MAG	PHI	W74 CP-MAG	PHI	W75 CP-MAG	PHI	W76 CP-MAG	PHI	W77 CP-MAG	PHI	W78 CP-MAG	PHI	W79 CP-MAG	PHI	W80 CP-MAG	PHI	W81 CP-MAG	PHI	W82 CP-MAG	PHI	W83 CP-MAG	PHI	W84 CP-MAG	PHI	W85 CP-MAG	PHI	W86 CP-MAG	PHI	W87 CP-MAG	PHI	W88 CP-MAG	PHI	W89 CP-MAG	PHI	W90 CP-MAG	PHI	W91 CP-MAG	PHI	W92 CP-MAG	PHI	W93 CP-MAG	PHI	W94 CP-MAG	PHI	W95 CP-MAG	PHI	W96 CP-MAG	PHI	W97 CP-MAG	PHI	W98 CP-MAG	PHI	W99 CP-MAG	PHI	W100 CP-MAG	PHI	W101 CP-MAG	PHI	W102 CP-MAG	PHI	W103 CP-MAG	PHI	W104 CP-MAG	PHI	W105 CP-MAG	PHI	W106 CP-MAG	PHI	W107 CP-MAG	PHI	W108 CP-MAG	PHI	W109 CP-MAG	PHI	W110 CP-MAG	PHI	W111 CP-MAG	PHI	W112 CP-MAG	PHI	W113 CP-MAG	PHI	W114 CP-MAG	PHI	W115 CP-MAG	PHI	W116 CP-MAG	PHI	W117 CP-MAG	PHI	W118 CP-MAG	PHI	W119 CP-MAG	PHI	W120 CP-MAG	PHI	W121 CP-MAG	PHI	W122 CP-MAG	PHI	W123 CP-MAG	PHI	W124 CP-MAG	PHI	W125 CP-MAG	PHI	W126 CP-MAG	PHI	W127 CP-MAG	PHI	W128 CP-MAG	PHI	W129 CP-MAG	PHI	W130 CP-MAG	PHI	W131 CP-MAG	PHI	W132 CP-MAG	PHI	W133 CP-MAG	PHI	W134 CP-MAG	PHI	W135 CP-MAG	PHI	W136 CP-MAG	PHI	W137 CP-MAG	PHI	W138 CP-MAG	PHI	W139 CP-MAG	PHI	W140 CP-MAG	PHI	W141 CP-MAG	PHI	W142 CP-MAG	PHI	W143 CP-MAG	PHI	W144 CP-MAG	PHI	W145 CP-MAG	PHI	W146 CP-MAG	PHI	W147 CP-MAG	PHI	W148 CP-MAG	PHI	W149 CP-MAG	PHI	W150 CP-MAG	PHI	W151 CP-MAG	PHI	W152 CP-MAG	PHI	W153 CP-MAG	PHI	W154 CP-MAG	PHI	W155 CP-MAG	PHI	W156 CP-MAG	PHI	W157 CP-MAG	PHI	W158 CP-MAG	PHI	W159 CP-MAG	PHI	W160 CP-MAG	PHI	W161 CP-MAG	PHI	W162 CP-MAG	PHI	W163 CP-MAG	PHI	W164 CP-MAG	PHI	W165 CP-MAG	PHI	W166 CP-MAG	PHI	W167 CP-MAG	PHI	W168 CP-MAG	PHI	W169 CP-MAG	PHI	W170 CP-MAG	PHI	W171 CP-MAG	PHI	W172 CP-MAG	PHI	W173 CP-MAG	PHI	W174 CP-MAG	PHI	W175 CP-MAG	PHI	W176 CP-MAG	PHI	W177 CP-MAG	PHI	W178 CP-MAG	PHI	W179 CP-MAG	PHI	W180 CP-MAG	PHI	W181 CP-MAG	PHI	W182 CP-MAG	PHI	W183 CP-MAG	PHI	W184 CP-MAG	PHI	W185 CP-MAG	PHI	W186 CP-MAG	PHI	W187 CP-MAG	PHI	W188 CP-MAG	PHI	W189 CP-MAG	PHI	W190 CP-MAG	PHI	W191 CP-MAG	PHI	W192 CP-MAG	PHI	W193 CP-MAG	PHI	W194 CP-MAG	PHI	W195 CP-MAG	PHI	W196 CP-MAG	PHI	W197 CP-MAG	PHI	W198 CP-MAG	PHI	W199 CP-MAG	PHI	W200 CP-MAG	PHI	W201 CP-MAG	PHI	W202 CP-MAG	PHI	W203 CP-MAG	PHI	W204 CP-MAG	PHI	W205 CP-MAG	PHI	W206 CP-MAG	PHI	W207 CP-MAG	PHI	W208 CP-MAG	PHI	W209 CP-MAG	PHI	W210 CP-MAG	PHI	W211 CP-MAG	PHI	W212 CP-MAG	PHI	W213 CP-MAG	PHI	W214 CP-MAG	PHI	W215 CP-MAG	PHI	W216 CP-MAG	PHI	W217 CP-MAG	PHI	W218 CP-MAG	PHI	W219 CP-MAG	PHI	W220 CP-MAG	PHI	W221 CP-MAG	PHI	W222 CP-MAG	PHI	W223 CP-MAG	PHI	W224 CP-MAG	PHI	W225 CP-MAG	PHI	W226 CP-MAG	PHI	W227 CP-MAG	PHI	W228 CP-MAG	PHI	W229 CP-MAG	PHI	W230 CP-MAG	PHI	W231 CP-MAG	PHI	W232 CP-MAG	PHI	W233 CP-MAG	PHI	W234 CP-MAG	PHI	W235 CP-MAG	PHI	W236 CP-MAG	PHI	W237 CP-MAG	PHI	W238 CP-MAG	PHI	W239 CP-MAG	PHI	W240 CP-MAG	PHI	W241 CP-MAG	PHI	W242 CP-MAG	PHI	W243 CP-MAG	PHI	W244 CP-MAG	PHI	W245 CP-MAG	PHI	W246 CP-MAG	PHI	W247 CP-MAG	PHI	W248 CP-MAG	PHI	W249 CP-MAG	PHI	W250 CP-MAG	PHI	W251 CP-MAG	PHI	W252 CP-MAG	PHI	W253 CP-MAG	PHI	W254 CP-MAG	PHI	W255 CP-MAG	PHI	W256 CP-MAG	PHI	W257 CP-MAG	PHI	W258 CP-MAG	PHI	W259 CP-MAG	PHI	W260 CP-MAG	PHI	W261 CP-MAG	PHI	W262 CP-MAG	PHI	W263 CP-MAG	PHI	W264 CP-MAG	PHI	W265 CP-MAG	PHI	W266 CP-MAG	PHI	W267 CP-MAG	PHI	W268 CP-MAG	PHI	W269 CP-MAG	PHI	W270 CP-MAG	PHI	W271 CP-MAG	PHI	W272 CP-MAG	PHI	W273 CP-MAG	PHI	W274 CP-MAG	PHI	W275 CP-MAG	PHI	W276 CP-MAG	PHI	W277 CP-MAG	PHI	W278 CP-MAG	PHI	W279 CP-MAG	PHI	W280 CP-MAG	PHI	W281 CP-MAG	PHI	W282 CP-MAG	PHI	W283 CP-MAG	PHI	W284 CP-MAG	PHI	W285 CP-MAG	PHI	W286 CP-MAG	PHI	W287 CP-MAG	PHI	W288 CP-MAG	PHI	W289 CP-MAG	PHI	W290 CP-MAG	PHI	W291 CP-MAG	PHI	W292 CP-MAG	PHI	W293 CP-MAG	PHI	W294 CP-MAG	PHI	W295 CP-MAG	PHI	W296 CP-MAG	PHI	W297 CP-MAG	PHI	W298 CP-MAG	PHI	W299 CP-MAG	PHI	W300 CP-MAG	PHI	W301 CP-MAG	PHI	W302 CP-MAG	PHI	W303 CP-MAG	PHI	W304 CP-MAG	PHI	W305 CP-MAG	PHI	W306 CP-MAG	PHI	W307 CP-MAG	PHI	W308 CP-MAG	PHI	W309 CP-MAG	PHI	W310 CP-MAG	PHI	W311 CP-MAG	PHI	W312 CP-MAG	PHI	W313 CP-MAG	PHI	W314 CP-MAG	PHI	W315 CP-MAG	PHI	W316 CP-MAG	PHI	W317 CP-MAG	PHI	W318 CP-MAG	PHI	W319 CP-MAG	PHI	W320 CP-MAG	PHI	W321 CP-MAG	PHI	W322 CP-MAG	PHI	W323 CP-MAG	PHI	W324 CP-MAG	PHI	W325 CP-MAG	PHI	W326 CP-MAG	PHI	W327 CP-MAG	PHI	W328 CP-MAG	PHI	W329 CP-MAG	PHI	W330 CP-MAG	PHI	W331 CP-MAG	PHI	W332 CP-MAG	PHI	W333 CP-MAG	PHI	W334 CP-MAG	PHI	W335 CP-MAG	PHI	W336 CP-MAG	PHI	W337 CP-MAG	PHI	W338 CP-MAG	PHI	W339 CP-MAG	PHI	W340 CP-MAG	PHI	W341 CP-MAG	PHI	W342 CP-MAG	PHI	W343 CP-MAG	PHI	W344 CP-MAG	PHI	W345 CP-MAG	PHI	W346 CP-MAG	PHI	W347 CP-MAG	PHI	W348 CP-MAG	PHI	W349 CP-MAG	PHI	W350 CP-MAG	PHI	W351 CP-MAG	PHI	W352 CP-MAG	PHI	W353 CP-MAG	PHI	W354 CP-MAG	PHI	W355 CP-MAG	PHI	W356 CP-MAG	PHI	W357 CP-MAG	PHI	W358 CP-MAG	PHI	W359 CP-MAG	PHI	W360 CP-MAG	PHI	W361 CP-MAG	PHI	W362 CP-MAG	PHI	W363 CP-MAG	PHI	W364 CP-MAG	PHI	W365 CP-MAG	PHI	W366 CP-MAG	PHI	W367 CP-MAG	PHI	W368 CP-MAG	PHI	W369 CP-MAG	PHI	W370 CP-MAG	PHI	W371 CP-MAG	PHI	W372 CP-MAG	PHI	W373 CP-MAG	PHI	W374 CP-MAG	PHI	W375 CP-MAG	PHI	W376 CP-MAG	PHI	W377 CP-MAG	PHI	W378 CP-MAG	PHI	W379 CP-MAG	PHI	W380 CP-MAG	PHI	W381 CP-MAG	PHI	W382 CP-MAG	PHI	W383 CP-MAG	PHI	W384 CP-MAG	PHI	W385 CP-MAG	PHI	W386 CP-MAG	PHI	W387 CP-MAG	PHI	W388 CP-MAG	PHI	W389 CP-MAG	PHI	W390 CP-MAG	PHI	W391 CP-MAG	PHI	W392 CP-MAG	PHI	W393 CP-MAG	PHI	W394 CP-MAG	PHI	W395 CP-MAG	PHI	W396 CP-MAG	PHI	W397 CP-MAG	PHI	W398 CP-MAG	PHI	W399 CP-MAG	PHI	W400 CP-MAG	PHI	W401 CP-MAG	PHI	W402 CP-MAG	PHI	W403 CP-MAG	PHI	W404 CP-MAG	PHI	W405 CP-MAG	PHI	W406 CP-MAG	PHI	W407 CP-MAG	PHI	W408 CP-MAG	PHI	W409 CP-MAG	PHI	W410 CP-MAG	PHI	W411 CP-MAG	PHI	W412 CP-MAG	PHI	W413 CP-MAG	PHI	W414 CP-MAG	PHI	W415 CP-MAG	PHI	W416 CP-MAG	PHI	W417 CP-MAG	PHI	W418 CP-MAG	PHI	W419 CP-MAG	PHI	W420 CP-MAG	PHI	W421 CP-MAG	PHI	W422 CP-MAG	PHI	W423 CP-MAG	PHI	W424 CP-MAG	PHI	W425 CP-MAG	PHI	W426 CP-MAG	PHI	W427 CP-MAG	PHI	W428 CP-MAG	PHI	W429 CP-MAG	PHI	W430 CP-MAG	PHI	W431 CP-MAG	PHI	W432 CP-MAG	PHI	W433 CP-MAG	PHI	W434 CP-MAG	PHI	W435 CP-MAG	PHI	W436 CP-MAG	PHI	W437 CP-MAG	PHI	W438 CP-MAG	PHI	W439 CP-MAG	PHI	W440 CP-MAG	PHI	W441 CP-MAG	PHI	W442 CP-MAG	PHI	W443 CP-MAG	PHI	W444 CP-MAG	PHI	W445 CP-MAG	PHI	W446 CP-MAG	PHI	W447 CP-MAG	PHI	W448 CP-MAG	PHI	W449 CP-MAG	PHI	W450 CP-MAG	PHI	W451 CP-MAG	PHI	W452 CP-MAG	PHI	W453 CP-MAG	PHI	W454 CP-MAG	PHI	W455 CP-MAG	PHI	W456 CP-MAG	PHI	W457 CP-MAG	PHI	W458 CP-MAG	PHI	W459 CP-MAG	PHI	W460 CP-MAG	PHI	W461 CP-MAG	PHI	W462 CP-MAG	PHI	W463 CP-MAG	PHI	W464 CP-MAG	PHI	W465 CP-MAG	PHI	W466 CP-MAG	PHI	W467 CP-MAG	PHI	W468 CP-MAG	PHI	W469 CP-MAG	PHI	W470 CP-MAG	PHI	W471 CP-MAG	PHI	W472 CP-MAG	PHI	W473 CP-MAG	PHI	W474 CP-MAG	PHI	W475 CP-MAG	PHI	W476 CP-MAG	PHI	W477 CP-MAG	PHI	W478 CP-MAG	PHI	W479 CP-MAG	PHI	W480 CP-MAG	PHI	W481 CP-MAG	PHI	W482 CP-MAG	PHI	W483 CP-MAG	PHI	W484 CP-MAG	PHI	W485 CP-MAG	PHI	W486 CP-MAG	PHI	W487 CP-MAG	PHI	W488 CP-MAG	PHI	W489 CP-MAG	PHI	W490 CP-MAG	PHI	W491 CP-MAG	PHI	W492 CP-MAG	PHI	W493 CP-MAG	PHI	W494 CP-MAG	PHI	W495 CP-MAG	PHI	W496 CP-MAG	PHI	W497 CP-MAG	PHI	W498 CP-MAG	PHI	W499 CP-MAG	PHI	W500 CP-MAG	PHI	W501 CP-MAG	PHI	W502 CP-MAG	PHI	W503 CP-MAG	PHI	W504 CP-MAG	PHI	W505 CP-MAG	PHI	W506 CP-MAG	PHI	W507 CP-MAG	PHI	W508 CP-MAG	PHI	W509 CP-MAG	PHI	W510 CP-MAG	PHI	W511 CP-MAG	PHI	W512 CP-MAG	PHI	W513 CP-MAG	PHI	W514 CP-MAG	PHI	W515 CP-MAG	PHI	W516 CP-MAG	PHI	W517 CP-MAG	PHI	W518 CP-MAG	PHI	W519 CP-MAG	PHI	W520 CP-MAG	PHI	W521 CP-MAG	PHI	W522 CP-MAG	PHI	W523 CP-MAG	PHI	W524 CP-MAG	PHI	W525 CP-MAG	PHI	W526 CP-MAG	PHI	W527 CP-MAG	PHI	W528 CP-MAG	PHI	W529 CP-MAG	PHI	W530 CP-MAG	PHI	W531 CP-MAG	PHI	W532 CP-MAG	PHI	W533 CP-MAG	PHI	W534 CP-MAG	PHI	W535 CP-MAG	PHI	W536 CP-MAG	PHI	W537 CP-MAG	PHI	W538 CP-MAG	PHI	W539 CP-MAG	PHI	W540 CP-MAG	PHI	W541 CP-MAG	PHI	W542 CP-MAG	PHI	W543 CP-MAG	PHI	W544 CP-MAG	PHI	W545 CP-MAG	PHI	W546 CP-MAG	PHI	W547 CP-MAG	PHI	W548 CP-MAG	PHI	W549 CP-MAG	PHI	W550 CP-MAG	PHI	W551 CP-MAG	PHI	W552 CP-MAG	PHI	W553 CP-MAG	PHI	W554 CP-MAG	PHI	W555 CP-MAG	PHI	W556 CP-MAG	PHI	W557 CP-MAG	PHI	W558 CP-MAG	PHI	W559 CP-MAG	PHI	W560 CP-MAG	PHI	W561 CP-MAG	PHI	W562 CP-MAG	PHI	W563 CP-MAG	PHI	W564 CP-MAG	PHI	W565 CP-MAG	PHI	W566 CP-MAG	PHI	W567 CP-MAG	PHI	W568 CP-MAG	PHI	W569 CP-MAG	PHI	W570 CP-MAG	PHI	W571 CP-MAG	PHI	W572 CP-MAG	PHI	W573 CP-MAG	PHI	W574 CP-MAG	PHI	W575 CP-MAG	PHI	W576 CP-MAG	PHI	W577 CP-MAG	PHI	W578 CP-MAG	PHI	W579 CP-MAG	PHI	W580 CP-MAG	PHI	W581 CP-MAG	PHI	W582 CP-MAG	PHI	W583 CP-MAG	PHI	W584 CP-MAG	PHI	W585 CP-MAG	PHI	W586 CP-MAG	PHI	W587 CP-MAG	PHI	W588 CP-MAG	PHI	W589 CP-MAG	PHI	W590 CP-MAG	PHI	W591 CP-MAG	PHI	W592 CP-MAG	PHI	W593 CP-MAG	PHI	W594 CP-MAG	PHI	W5
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ORIGINAL PAGE NO
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 190 ALPHA-MCL = 2.0 PDP RUN PT 3.11
RUN 2 ALPHA-RAR = 2.0 C-COMP = 33314
POINT 3 SIGMA = 3.0 V-DEF = 202.49
5 COMPUTED FREQUENCY = 19.22. K = .1491

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER DIAMETER ***

X	CP	012-UPPER	062-UPPER	148-UPPER	261-UPPER	392-UPPER	530-UPPER	661-UPPER
N	CP	REAL CPMAG	CPREAL CPMAG	CPREAL CPMAG	CPREAL CPMAG	CPREAL CPMAG	CPREAL CPMAG	CPREAL CPMAG
1	1.714	1.901	-4.559	-2.430	-1.133	-513	316	1.032
2	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
3	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
4	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
5	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
6	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
7	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
8	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
9	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
10	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032

X	CP	012-LOWER	062-LOWER	148-LOWER	261-LOWER	392-LOWER	530-LOWER	661-LOWER
N	CP	REAL CPMAG	CPREAL CPMAG	CPREAL CPMAG	CPREAL CPMAG	CPREAL CPMAG	CPREAL CPMAG	CPREAL CPMAG
1	1.714	1.901	-4.559	-2.430	-1.133	-513	316	1.032
2	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
3	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
4	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
5	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
6	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
7	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
8	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
9	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032
10	1.269	1.911	1.278	1.278	1.133	1.133	1.133	1.032

MODE 1 -- CENTER PERIODICITY TEST
FILE 190 ALPHA-MAG = 2.0 POP RUNPFI = 3314
RUN POINT 5 ALPHA-RFI = 0.6 COMPI = 202.49
POINT 5 SIGMA = 0. V-REF = 19.22, K = .1491
COMPUTED FREQUENCY = 19.22, K = .1491
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1.0891	169.94	1.0891	172.74	1.1354	192.39	1.1354	192.39	1.1354	192.39	1.1354	192.39
2	1.0952	151.58	1.0952	155.90	1.1433	161.83	1.1433	161.83	1.1433	161.83	1.1433	161.83
3	1.1107	132.03	1.1107	136.41	1.1523	147.42	1.1523	147.42	1.1523	147.42	1.1523	147.42
4	1.1247	113.39	1.1247	117.85	1.1668	136.72	1.1668	136.72	1.1668	136.72	1.1668	136.72
5	1.1350	94.30	1.1350	98.82	1.1744	119.48	1.1744	119.48	1.1744	119.48	1.1744	119.48
6	1.1433	75.25	1.1433	79.82	1.1826	101.13	1.1826	101.13	1.1826	101.13	1.1826	101.13
7	1.1504	56.25	1.1504	60.82	1.1907	81.72	1.1907	81.72	1.1907	81.72	1.1907	81.72
8	1.1563	37.25	1.1563	41.82	1.1989	62.23	1.1989	62.23	1.1989	62.23	1.1989	62.23
9	1.1611	18.25	1.1611	22.82	1.2070	42.72	1.2070	42.72	1.2070	42.72	1.2070	42.72
10	1.1658	0.25	1.1658	4.82	1.2150	23.23	1.2150	23.23	1.2150	23.23	1.2150	23.23

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1.2134	343.42	1.2134	347.76	1.2337	367.11	1.2337	367.11	1.2337	367.11	1.2337	367.11
2	1.2167	324.67	1.2167	328.94	1.2366	348.73	1.2366	348.73	1.2366	348.73	1.2366	348.73
3	1.2199	305.92	1.2199	310.19	1.2394	329.80	1.2394	329.80	1.2394	329.80	1.2394	329.80
4	1.2231	287.17	1.2231	291.44	1.2422	310.86	1.2422	310.86	1.2422	310.86	1.2422	310.86
5	1.2263	268.42	1.2263	272.69	1.2450	291.92	1.2450	291.92	1.2450	291.92	1.2450	291.92
6	1.2295	249.67	1.2295	253.94	1.2478	272.98	1.2478	272.98	1.2478	272.98	1.2478	272.98
7	1.2327	230.92	1.2327	235.19	1.2506	254.04	1.2506	254.04	1.2506	254.04	1.2506	254.04
8	1.2359	212.17	1.2359	216.44	1.2534	235.10	1.2534	235.10	1.2534	235.10	1.2534	235.10
9	1.2391	193.42	1.2391	197.69	1.2562	216.16	1.2562	216.16	1.2562	216.16	1.2562	216.16
10	1.2423	174.67	1.2423	178.94	1.2590	197.22	1.2590	197.22	1.2590	197.22	1.2590	197.22

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1.2455	155.67	1.2455	159.94	1.2617	174.74	1.2617	174.74	1.2617	174.74	1.2617	174.74
2	1.2487	136.92	1.2487	141.19	1.2645	155.80	1.2645	155.80	1.2645	155.80	1.2645	155.80
3	1.2519	118.17	1.2519	122.44	1.2673	136.86	1.2673	136.86	1.2673	136.86	1.2673	136.86
4	1.2551	99.42	1.2551	103.69	1.2701	117.92	1.2701	117.92	1.2701	117.92	1.2701	117.92
5	1.2583	80.67	1.2583	84.94	1.2729	98.98	1.2729	98.98	1.2729	98.98	1.2729	98.98
6	1.2615	61.92	1.2615	66.19	1.2757	79.04	1.2757	79.04	1.2757	79.04	1.2757	79.04
7	1.2647	43.17	1.2647	47.44	1.2785	60.10	1.2785	60.10	1.2785	60.10	1.2785	60.10
8	1.2679	24.42	1.2679	28.69	1.2813	41.16	1.2813	41.16	1.2813	41.16	1.2813	41.16
9	1.2711	5.67	1.2711	9.94	1.2841	22.22	1.2841	22.22	1.2841	22.22	1.2841	22.22
10	1.2743	-13.08	1.2743	-7.75	1.2869	3.28	1.2869	3.28	1.2869	3.28	1.2869	3.28

MODE 1 -- WALL PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 103 ALPHA-POL = 2.0 FOP RUN-PT 3314
RUN 2 ALPHA-FAR = 2.0 C-COMP = 3314
POINT 5 SIGMA = 1.0 V-DEF = 2J2.89
COMPUTED FREQUENCY = 19.22, K = 1491
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCP ⁰¹²	DELCP ¹²	DELCP ¹⁴⁹	DELCP ²⁶¹	DELCP ³⁹²	DELCP ⁵³⁰	DELCP ⁶⁶¹
1	19.714	-1.640	9.137	-2.414	4.017	1.133	1.133
2	-1.145	-.083	-.057	-.019	-.013	-.016	-.016
3	-1.122	-.221	-.171	-.076	-.043	-.040	-.055
4	-1.111	-.118	-.064	-.017	-.011	-.014	-.028
5	-1.013	-.016	-.012	-.014	-.015	-.017	-.026
6	-1.025	-.010	-.011	-.011	-.012	-.013	-.019
7	-1.021	-.009	-.010	-.012	-.012	-.014	-.015
8	-1.066	-.049	-.033	-.041	-.033	-.034	-.009
9	-1.153	-.021	-.015	-.012	-.013	-.014	-.003
10	-1.269	-.034	-.012	-.012	-.013	-.018	-.014

X	DELCP ⁷⁷⁴	DELCP ⁸⁵⁰	DELCP ⁹¹⁰	CMREAL	CMIMAG	N	CMREAL	CMIMAG
1	-2.274	-.037	-.047	326	326	1	1.105	1.138
2	-2.244	-.033	-.034	326	326	2	1.105	1.138
3	-2.217	-.037	-.034	326	326	3	1.105	1.138
4	-2.115	-.037	-.034	326	326	4	1.105	1.138
5	-2.015	-.037	-.034	326	326	5	1.105	1.138
6	-1.919	-.037	-.034	326	326	6	1.105	1.138
7	-1.812	-.037	-.034	326	326	7	1.105	1.138
8	-1.712	-.037	-.034	326	326	8	1.105	1.138
9	-1.612	-.037	-.034	326	326	9	1.105	1.138
10	-1.512	-.037	-.034	326	326	10	1.105	1.138

WALL STATION	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
2	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
3	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
4	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
5	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
6	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
7	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
8	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
9	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
10	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125

*** WALL PRESSURES, PER RADIAN ***

*** STABILITY PARAMETER

*** XI = .1003 ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- DCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 1 ALPHA-MCL = 2.0 POP RUN*PT 3.05
RUN 3 ALPHA-BAR = 2.0 Q-COMP = .32493
POINT 1 SIGMA = .45 V-REF = 199.97
COMPUTED FREQUENCY = 9.22, K = .0724

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** SLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.012-UPPER	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	17	.459	-8.819	-6.221	-2.056	-3.788	-2.547	-1.879	-1.371	-922
2	3	.237	-1.941	-.036	-.060	-.076	-.068	-.465	-.008	-.073
3	3	.429	-1.142	-.144	-.060	-.355	-.347	-.353	-.375	-.371
4	5	.039	-.155	-.014	-.060	-.059	-.055	-.005	-.055	-.024
5	5	.573	-.308	-.031	-.027	-.018	-.043	-.083	-.063	-.032
6	7	.118	-.430	-.022	-.020	-.020	-.003	-.005	-.034	-.003
7	7	.021	-.100	-.024	-.064	-.020	-.017	-.055	-.015	-.018
8	8	.090	-.197	-.016	-.044	-.011	-.030	-.022	-.048	-.019
9	8	.041	-.197	-.028	-.044	-.024	-.030	-.007	-.019	-.009
10	10	.080	-.045	-.018	-.002	-.035	-.012	-.005	-.013	-.009

X	N	CPREAL	CPIMAG	.774-UPPER	.860-UPPER	.910-UPPER	.012-LOWER	.062-LOWER	.148-LOWER	.261-LOWER
1	17	.627	2.602	-.503	-.503	-.486	9.586	5.290	2.382	1.449
2	3	.112	-.055	-.094	-.054	-.062	1.050	.591	-.142	-.013
3	3	.141	-.116	-.357	-.093	-.375	-.253	.021	-.328	-.345
4	5	.001	-.018	-.004	-.052	-.002	-.072	.273	-.021	-.026
5	5	.000	-.035	-.053	-.051	-.063	-.076	-.051	-.063	-.060
6	7	.001	-.015	-.051	-.017	-.004	-.018	-.026	-.009	-.002
7	7	.003	-.056	-.006	-.063	-.011	-.001	-.024	-.033	-.017
8	8	.002	-.022	-.011	-.032	-.011	-.071	-.054	-.033	-.022
9	8	.006	-.046	-.009	-.036	-.006	-.034	-.001	-.046	-.005
10	10	.004	-.023	-.009	-.019	-.009	-.018	-.030	-.007	-.005

X	N	CPREAL	CPIMAG	.392-LOWER	.530-LOWER	.661-LOWER	.774-LOWER	.860-LOWER	.910-LOWER
1	17	.737	2.041	-.522	-.522	-.050	1.765	-.469	-.255
2	3	.001	-.068	-.032	-.092	-.036	-.098	-.021	-.041
3	3	.001	-.020	-.036	-.036	-.046	-.079	-.367	-.309
4	5	.008	-.021	-.065	-.036	-.050	-.016	-.005	-.001
5	5	.006	-.001	-.005	-.011	-.021	-.017	-.069	-.055
6	7	.000	-.034	-.014	-.009	-.021	-.022	-.017	-.010
7	7	.000	-.015	-.014	-.066	-.003	-.067	-.016	-.009
8	8	.001	-.025	-.012	-.021	-.004	-.001	-.002	-.012
9	8	.001	-.025	-.012	-.021	-.004	-.001	-.002	-.012
10	10	.001	-.025	-.012	-.021	-.004	-.001	-.002	-.012

OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 1 ALPHA-MCL = 2.0 PDP RUN-PT 3.05
RUN 3 ALPHA-RAR = 2.0 Q-COMP = 32.93
POINT 1 SIGMA = 45. V-REF = 199.97
COMPUTED FREQUENCY = 9.22. K = .0724
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PLR RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI				
1	19	560	206.80	6	552	198.28	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
2	3	720	329.68	6	552	239.68	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
3	1	220	110.56	6	552	201.48	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
4	5	160	175.80	6	552	129.91	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
5	4	651	151.75	6	552	129.91	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
6	7	446	285.31	6	552	129.91	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
7	4	102	101.75	6	552	129.91	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
8	3	311	339.12	6	552	129.91	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
9	2	201	78.21	6	552	129.91	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72
10	0	092	209.64	6	552	129.91	3	838	189.27	2	558	174.68	2	166	150.24	2	393	124.95	2	732	109.72

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	676	103.56	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
2	3	360	198.75	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
3	4	038	191.48	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
4	5	075	143.21	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
5	6	015	192.29	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
6	7	060	112.18	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
7	8	022	185.35	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
8	9	047	82.88	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
9	10	023	98.77	2	479	101.71	2	337	102.00	12	094	37.56	6	840	39.34	4	019	53.66	3	090	61.54
10																					

X	N	.392-LOWER		.530-LOWER		.661-LOWER		.774-LOWER		.860-LOWER		.913-LOWER			
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI		
1	2	170	70.15	2	305	76.91	1	728	88.35	1	736	105.68	1	479	99.93
2	3	008	158.71	2	305	115.09	1	060	1202.39	1	321	187.25	1	001	298.15
3	3	321	192.30	2	397	193.32	1	409	202.39	1	368	192.34	1	300	195.15
4	3	064	160.97	2	036	84.92	1	060	139.27	1	086	177.50	1	008	192.65
5	3	005	154.76	2	075	151.15	1	051	167.17	1	056	147.46	1	008	144.11
6	3	005	140.00	2	007	149.20	1	023	207.44	1	027	133.61	1	005	141.77
7	3	005	100.65	2	368	103.96	1	068	87.84	1	061	104.87	1	009	101.12
8	3	016	249.04	2	321	262.54	1	026	237.11	1	001	209.87	1	004	242.07
9	3	028	84.80	2	033	91.55	1	000	100.10	1	003	71.22	1	004	78.51
10	3	025	91.67	2	029	80.30	1	023	61.07	1	021	106.64	1	005	123.83

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MODE 1 -- CENTER BLADE DATA, WALL SOLUTIONS

FILE 1 ALPHA-WCL = 2.0 PDP RUN-PT 3.05
RUN 3 ALPHA-RAR = 2.0 O-COMP = 32493
POINT 1 SIGMA = .45 V-REF = 199.97
COMPUTED FREQUENCY = 9.22, N = .0724

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	X = .012		.062		.148		.261		.392		.530		.661	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	27.045	16.192	11.512	6.392	3.170	3.856	3.996	2.435	2.616	1.893	1.893	.972	.845	
2	2.197	1.592	.427	.326	.027	.030	.081	.039	.038	.014	.014	.107	.003	
3	.175	1.237	.386	.355	.021	.022	.080	.028	.039	.030	.030	.070	.066	
4	.033	1.160	.287	.317	.014	.005	.002	.005	.017	.011	.011	.018	.035	
5	.498	.311	.045	.105	.044	.001	.002	.027	.025	.051	.052	.016	.012	
6	.109	.462	.020	.004	.018	.001	.018	.051	.044	.003	.003	.025	.005	
7	.161	.375	.022	.009	.032	.024	.032	.012	.043	.001	.001	.021	.017	
8	.075	.312	.024	.041	.030	.023	.032	.007	.030	.026	.026	.007	.014	
9	.098	.099	.012	.030	.042	.037	.016	.026	.004	.018	.024	.007	.008	
10														

N	X = .774		.860		.913		CNREAL		CNIMAG		N	CMREAL		CMIMAG	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP		DELCP	DELCP	DELCP	DELCP
1	.608	.937	.074	.756	.231	.829	1.496	1.496	1.496	1.496	1	1.076	.744	.744	.744
2	.014	.109	.074	.053	.019	.128	.051	.051	.051	.051	2	.014	.003	.003	.003
3	.036	.008	.017	.047	.003	.017	.047	.047	.047	.047	3	.015	.010	.010	.010
4	.013	.002	.006	.017	.008	.028	.028	.028	.028	.028	4	.006	.002	.002	.002
5	.022	.005	.014	.006	.014	.004	.004	.004	.004	.004	5	.001	.001	.001	.001
6	.016	.001	.009	.004	.001	.005	.005	.005	.005	.005	6	.001	.001	.001	.001
7	.023	.001	.001	.001	.001	.002	.002	.002	.002	.002	7	.001	.001	.001	.001
8	.006	.002	.001	.001	.001	.001	.001	.001	.001	.001	8	.001	.001	.001	.001
9											9	.004	.004	.004	.004
10											10	.003	.003	.003	.003

*** STABILITY PARAMETER

* XI = -.7438 *

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	W1		W2		W4		W6		W125		W125		W125
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	
1	.406	2.233	.385	2.022	.375	2.022	2.022	2.022	2.022	2.022	2.022	2.022	2.022	2.022
2	.090	.384	.631	.129	.129	.129	.129	.129	.129	.129	.129	.129	.129	.129
3	.051	.072	.018	.066	.066	.066	.066	.066	.066	.066	.066	.066	.066	.066
4	.049	.043	.053	.014	.014	.014	.014	.014	.014	.014	.014	.014	.014	.014
5	.040	.031	.079	.063	.063	.063	.063	.063	.063	.063	.063	.063	.063	.063
6	.034	.067	.015	.063	.063	.063	.063	.063	.063	.063	.063	.063	.063	.063
7	.027	.024	.015	.063	.063	.063	.063	.063	.063	.063	.063	.063	.063	.063
8	.022	.014	.022	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075
9	.017	.017	.014	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
10														

MODE 1 -- OCNI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 1 ALPHA-MCL = 2.0 PDP RUN.PT 3.05
RUN 3 ALPHA-BAR = 2.0 Q-COMP = .32493
POINT 1 SIGMA = .45 V-PEF = .199.97
COMPUTED FREQUENCY = 9.22, K = .0724

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.145	.261	.392	.530	.661							
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI						
1	31.522	30.91	13.167	29.04	7.276	32.00	.680	31.316	2.789	20.24	1.914	8.52	1.284	318.98
2	2.705	143.94	1.019	294.75	.182	350.39	.090	334.41	.060	346.74	.019	187.42	.107	181.52
3	1.749	278.07	.524	42.60	.034	320.99	.028	273.35	.055	315.70	.050	256.47	.066	265.64
4	.583	280.42	.427	312.12	.081	356.53	.081	356.53	.034	299.18	.006	217.47	.034	205.35
5	.473	327.99	.407	100.77	.084	178.36	.027	274.79	.057	296.39	.018	260.91	.024	202.52
6	.477	102.15	.095	259.80	.023	117.94	.051	91.324	.006	85.04	.042	270.68	.021	205.94
7	.368	284.60	.009	259.80	.043	226.18	.021	213.224	.046	356.22	.035	254.57	.021	13.68
8	.148	168.54	.072	166.13	.033	228.18	.040	169.92	.028	134.48	.035	216.73	.030	151.91
9	.139	45.29	.037	122.56	.037	142.80	.033	191.99	.016	77.26	.022	33.58	.022	22.13
10			.032	111.07	.056	41.31	.030	57.46						

X =	.774	.860	.910	PHI	DELCPH	PHI	N	CM-MAG	PHIN	M	CM-MAG	PHIM
1	1.034	306.40	.757	272.58	.661	285.57	1	3.864	24.78	1	3.308	34.67
2	.110	262.48	.091	215.61	.129	261.60	2	.056	24.06	2	.006	155.59
3	.042	117.61	.048	102.11	.072	144.99	3	.054	320.23	3	.017	152.56
4	.037	173.06	.018	255.99	.028	262.87	4	.032	302.53	4	.019	322.98
5	.022	173.52	.012	212.65	.010	320.00	5	.026	295.71	5	.007	343.23
6	.022	15.91	.021	203.05	.005	345.02	6	.009	300.49	6	.010	390.24
7	.023	15.91	.010	257.32	.005	257.32	7	.019	188.68	7	.011	248.62
8	.018	287.57	.010	12.01	.010	12.01	8	.019	188.68	8	.011	170.54
9	.003	238.91	.008	271.36	.008	271.36	9	.023	179.34	9	.005	159.80
10			.014	85.38			10			10		

*** STABILITY PARAMETE

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.270	100.30	.059	100.78	8.616	194.08	2.350	161.95	7.131	237.42
2	.123	136.97	.734	140.30	1.712	114.60	.094	144.95	1.644	176.18
3	.074	191.59	.478	164.30	.463	139.91	.489	193.36	.630	176.18
4	.065	139.24	.108	80.15	.052	163.07	.066	145.33	.083	190.60
5	.050	38.37	.085	128.41	.175	129.07	.062	149.14	.142	230.45
6	.067	193.66	.065	103.36	.030	293.62	.012	40.51	.079	97.20
7	.044	190.22	.039	172.97	.104	111.93	.089	100.58	.145	110.37
8	.031	56.49	.078	73.97	.048	300.04	.003	237.08	.081	358.91
9	.031	56.49	.041	70.58	.044	229.64	.024	172.95	.032	20.01
10					.044	229.64			.030	180.16

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 3 ALPHA-WCL = 2.0 PDP RUN.PT 3.07
RUN 3 ALPHA-BAP = 2.0 Q-COMP = 32370
POINT 3 SIGMA = .5 V-DEF = 199.58
COMPUTED FREQUENCY = 15.54, K = .1223

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.198-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.651-UPPER CPREAL CPIMAG
1	1	-19.159	-7.372	-4.239	-2.933	-2.258	-1.713	-1.168
2	2	-2.688	-1.055	-1.121	-1.110	-1.092	-1.019	-1.051
3	3	.211	-1.139	-1.013	.001	.019	.015	.004
4	4	.387	.029	.035	.036	.010	.077	.042
5	5	.370	.500	.038	.025	.028	.048	.020
6	6	.036	.042	.018	.001	.006	.015	.009
7	7	.133	.124	.054	.020	.008	.035	.014
8	8	.023	.115	.038	.040	.051	.037	.020
9	9	.133	.182	.038	.026	.020	.016	.003
10	10	.077	.022	.016	.004	.009	.004	.005

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.198-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG		
1	1	-.874	2.107	-.793	1.835	-.787	1.835	-.787	1.835	
2	2	.036	.036	.017	-.022	.046	-.022	.046	-.022	.046
3	3	.034	.123	.015	-.034	.019	-.034	.019	-.034	.019
4	4	.038	.036	.015	-.025	.047	-.025	.047	-.025	.047
5	5	.038	.008	.029	-.006	.047	-.006	.047	-.006	.047
6	6	.035	.008	.029	-.011	.047	-.011	.047	-.011	.047
7	7	.035	.008	.029	-.011	.047	-.011	.047	-.011	.047
8	8	.034	.009	.027	-.010	.046	-.010	.046	-.010	.046
9	9	.034	.009	.027	-.010	.046	-.010	.046	-.010	.046
10	10	.016	.029	.017	-.032	.013	-.032	.013	-.032	.013

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	.001	1.838	-.349	1.621	-.428	1.618
2	2	.022	.014	.023	.039	.055	.099
3	3	.029	.082	.011	.130	.025	.092
4	4	.020	.036	.027	.048	.027	.048
5	5	.024	.005	.027	.012	.042	.019
6	6	.024	.015	.026	.010	.042	.010
7	7	.027	.012	.026	.007	.042	.007
8	8	.027	.012	.026	.007	.042	.007
9	9	.027	.012	.026	.007	.042	.007
10	10	.011	.039	.001	.001	.002	.018

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 3 ALPHA-MCL = 2.0 PDF RUN-PT 3.07
RUN 3 ALPHA-RAP = 2.0 Q-COMP = 32370
POINT 3 SIGMA = 45.0 V-REF = 199.58
COMPUTED FREQUENCY = 15.54, K = .1223

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X = .012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER		
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	19.559	202.10	7.020	195.44	4.294	189.40	2.933	180.03	2.371	162.25	2.295	137.88	2.423	118.02
2	1.159	317.02	.121	209.56	.067	180.85	.054	170.56	.062	178.17	.019	154.52	.052	119.97
3	1.159	18.525	.142	203.28	.036	196.88	.036	190.63	.012	172.20	.084	149.76	.051	121.81
4	.623	18.51	.017	12.66	.043	332.98	.025	232.39	.061	167.43	.041	137.98	.009	125.14
5	.393	317.02	.034	22.15	.062	349.25	.025	232.39	.015	147.36	.020	129.57	.010	128.15
6	.182	256.02	.029	289.26	.039	330.26	.050	232.39	.051	173.41	.032	129.57	.018	135.37
7	.118	256.02	.012	137.30	.012	145.26	.027	159.69	.020	184.52	.018	129.57	.022	135.37
8	.080	164.30	.015	56.62	.041	113.11	.033	97.47	.020	184.52	.045	85.06	.025	101.53

X = .774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.148-LOWER		.261-LOWER		
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.281	112.58	2.183	114.72	1.997	123.18	1.490	127.72	6.047	256.79	3.519	52.78	2.614	64.56
2	.096	272.01	.080	279.11	.051	283.59	.138	327.81	.876	339.84	.119	52.02	.081	60.91
3	.127	283.00	.106	293.24	.086	307.31	.123	280.08	.397	339.84	.120	274.87	.086	284.26
4	.038	354.70	.037	3.00	.032	352.22	.051	271.00	.103	251.73	.054	223.34	.081	2276.47
5	.008	299.51	.009	49.77	.048	282.17	.098	180.12	.086	247.66	.029	223.34	.071	2312.97
6	.008	62.91	.023	337.32	.010	350.93	.117	187.36	.077	344.59	.037	223.34	.071	2312.97
7	.016	213.07	.036	241.24	.029	324.17	.063	221.32	.064	211.19	.021	305.93	.012	219.81
8	.032	60.96	.010	91.08	.016	59.46	.019	97.86	.038	60.21	.014	330.96	.013	12.31
10														

X = .392-LOWER		.530-LOWER		.661-LOWER		.774-LOWER		.860-LOWER		.910-LOWER		
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	.882	77.69	2.064	86.85	1.657	101.85	1.674	104.82	1.571	111.07	1.489	118.10
2	.082	272.01	.017	193.89	.045	120.45	.055	285.40	.072	283.71	.047	242.09
3	.037	283.00	.014	273.84	.027	169.31	.055	298.91	.100	278.53	.137	272.74
4	.024	347.14	.029	359.57	.016	310.48	.046	24.96	.045	21.55	.036	27.92
5	.012	309.72	.010	175.17	.026	176.28	.021	175.75	.015	188.71	.010	319.30
6	.011	197.67	.007	129.77	.015	129.77	.020	264.47	.015	10.45	.003	218.86
7	.019	26.41	.003	277.24	.007	277.24	.031	18.66	.013	252.85	.017	22.74
8					.013	78.46					.036	248.44

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 3 ALPHA-PCL = 2.0 PDP RUN-PT 3.07
RUN 3 ALPHA-PAR = 2.0 O-COMP = 3237C
POINT 3 SIGMA = 45. V-REF = 199.58
COMPUTED FREQUENCY = 15.54, K = .1223

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	.012	.062	.149	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	27.826	13.583	11.812	5.202	6.365	3.503	4.056
2	-1.705	-1.749	-0.955	-0.793	-0.194	-0.093	-0.103
3	-1.170	-1.370	-0.405	-0.004	-0.023	-0.054	-0.022
4	-0.444	-0.338	-0.142	-0.055	-0.015	-0.039	-0.040
5	-0.213	-0.351	-0.139	-0.033	-0.053	-0.010	-0.033
6	-0.075	-0.384	-0.085	-0.100	-0.053	-0.010	-0.044
7	-0.128	-0.242	-0.084	-0.109	-0.055	-0.012	-0.029
8	-0.075	-0.072	-0.037	-0.037	-0.012	-0.009	-0.017
9	-0.224	-0.219	-0.044	-0.025	-0.016	-0.011	-0.022
10	-0.074	-0.003	-0.011	-0.021	-0.028	-0.045	-0.012

X	.774	.860	.910	.910	.910	.910	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	4.46	4.46	4.46	4.46	4.46	4.46	4.46
2	-0.41	-0.41	-0.41	-0.41	-0.41	-0.41	-0.41
3	-0.18	-0.18	-0.18	-0.18	-0.18	-0.18	-0.18
4	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
5	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
6	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16
7	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
8	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
9	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
10	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02

*** STABILITY PARAMETER ***

WALL NO.	W1	W2	W3	W4	W5	W6	W10
GAP FRACTION	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	0.898	1.756	0.332	1.564	0.296	0.296	0.296
2	-0.133	-0.074	-0.549	-0.074	-0.074	-0.074	-0.074
3	-0.001	-0.152	-0.015	-0.015	-0.015	-0.015	-0.015
4	-0.046	-0.023	-0.015	-0.015	-0.015	-0.015	-0.015
5	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015
6	-0.020	-0.019	-0.015	-0.015	-0.015	-0.015	-0.015
7	-0.003	-0.011	-0.015	-0.015	-0.015	-0.015	-0.015
8	-0.008	-0.004	-0.015	-0.015	-0.015	-0.015	-0.015
9	-0.021	-0.000	-0.015	-0.015	-0.015	-0.015	-0.015
10	-0.021	-0.000	-0.015	-0.015	-0.015	-0.015	-0.015

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W10
GAP FRACTION	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	0.898	1.756	0.332	1.564	0.296	0.296	0.296
2	-0.133	-0.074	-0.549	-0.074	-0.074	-0.074	-0.074
3	-0.001	-0.152	-0.015	-0.015	-0.015	-0.015	-0.015
4	-0.046	-0.023	-0.015	-0.015	-0.015	-0.015	-0.015
5	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015
6	-0.020	-0.019	-0.015	-0.015	-0.015	-0.015	-0.015
7	-0.003	-0.011	-0.015	-0.015	-0.015	-0.015	-0.015
8	-0.008	-0.004	-0.015	-0.015	-0.015	-0.015	-0.015
9	-0.021	-0.000	-0.015	-0.015	-0.015	-0.015	-0.015
10	-0.021	-0.000	-0.015	-0.015	-0.015	-0.015	-0.015

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 3 ALPHA-MCL = 2.0 PDP RUN.PT 3.07
RUN 3 ALPHA-BAR = 2.0 Q-COMP = 32370
POINT 3 ALPHA-SIGMA = 45.0 V-REF = 199.58
COMPUTED FREQUENCY = 15.54, K = .1223

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	30.964	26.02	12.907	23.77	7.265	28.83	4.694	30.21	2.884	22.75	1.849	16.03
2	2.442	134.26	799	263.15	215	334.49	117	331.65	.043	344.76	.013	20.24
3	1.2800	222.93	405	62	.059	293.11	.018	305.08	.036	241.30	.008	262.19
4	.864	303.96	336	245.02	.042	290.82	.053	319.61	.059	275.63	.021	179.23
5	.884	303.96	.089	358.02	.015	175.20	.015	283.14	.023	235.51	.060	158.57
6	.884	191.88	.131	229.90	.053	190.10	.011	162.36	.025	88.59	.030	205.58
7	.283	117.96	.110	93.82	.087	192.31	.064	132.68	.059	355.78	.040	161.70
8	.104	144.05	.092	336.12	.059	214.15	.014	307.01	.009	350.78	.016	65.93
9	.313	224.32	.050	209.40	.053	302.52	.034	199.07	.013	312.64	.044	288.18
10	.074	357.76	.024	62.43								

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	.662	312.40	613	291.84	530	279.27	3.877	22.08	.055	225.04	.012	29.20
2	.112	248.29	.109	236.09	.093	223.31	.047	225.98	.043	220.32	.015	298.50
3	.022	327.03	.009	320.91	.006	241.71	.023	288.42	.023	184.41	.006	156.14
4	.023	379.65	.019	58.64	.027	136.85	.040	321.28	.018	321.17	.007	336.56
5	.014	354.68	.017	296.58	.007	138.59	.010	321.28	.010	321.17	.009	307.17
6	.014	363.25	.027	204.22	.013	228.19	.018	321.17	.023	316.33		
7	.017	335.18	.015	122.26	.014	148.19						
8	.017	323.05	.020	47.84	.012	157.84						
9	.023	306.66	.029	14.65	.021	33.84						
10												

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.973	117.09	1.820	120.78	9.169	191.56	2.704	171.64	7.309	234.51		
2	.153	150.76	.624	151.71	1.681	302.73	.178	229.83	1.309	236.72		
3	.026	267.79	.025	110.02	.325	228.13	.050	356.07	.047	236.91		
4	.026	333.01	.063	303.96	.054	228.02	.026	334.07	.075	236.91		
5	.019	225.17	.014	337.19	.146	73.44	.013	20.67	.173	231.11		
6	.020	43.70	.010	126.12	.008	56.87	.013	20.67	.104	121.06		
7	.018	74.56	.010	224.57	.049	307.96	.016	355.80	.027	25.23		
8	.012	224.23	.015	242.23	.048	158.39	.022	162.81	.025	295.68		
9	.021	359.02	.010	18.65	.048	266.62	.016	92.83	.038	140.88		
10												

*** STABILITY PARAMETER ***

* XI = -.8235

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FILE      5  ALPHA-MCL = 2.0  PDP RUN-PT  3.09
RUN       3  ALPHA-PAR = 2.0  Q-COMP = .32614
POINT    5  SIGMA = 45.  V-REF = 200.34
          COMPUTED FREQUENCY = 19.21, K = .1506
FOURIER COEFFICIENTS: REAL & IMAGINARY

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

[illegible]

X	N	= .770-UPPER CPREAL CPI MAG	.860-UPPER CPREAL CPI MAG	.910-UPPER CPREAL CPI MAG	.012-LOWER CPREAL CPI MAG	.062-LOWER CPREAL CPI MAG	.198-LOWER CPREAL CPI MAG	.261-LOWER CPREAL CPI MAG
1	2	1.966	1.661	1.731	9.850	5.506	2.526	1.521
2	3	1.951	1.448	1.732	9.852	5.507	2.593	1.521
3	4	1.955	1.177	1.732	9.852	5.507	2.593	1.521
4	5	1.955	1.014	1.732	9.852	5.507	2.593	1.521
5	6	1.955	1.014	1.732	9.852	5.507	2.593	1.521
6	7	1.955	1.014	1.732	9.852	5.507	2.593	1.521
7	8	1.955	1.014	1.732	9.852	5.507	2.593	1.521
8	9	1.955	1.014	1.732	9.852	5.507	2.593	1.521
9	10	1.955	1.014	1.732	9.852	5.507	2.593	1.521

X	N	= 392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.919-LOWER CPREAL CPIMAG
1	2	1.772	.539	.039	1.614	.195	1.316
2	3	1.067	.016	.029	.014	.020	.11
3	4	1.051	.056	.027	.034	.075	.323
4	5	1.033	.000	.005	.007	.015	.029
5	6	1.016	.000	.031	.017	.030	.026
6	7	1.007	.017	.031	.002	.017	.008
7	8	1.008	.039	.039	.011	.014	.013
8	9	.711	.019	.003	.009	.016	.009
9	10	.071	.019	.017	.006	.024	.030
10		.019	.055	.031	.022	.025	.011
		.008		.007	.020	.030	.011

MODE 1 --- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 5 ALPHA-MCL = 2.0 PUP RUN-PT 3.09
RUN 3 ALPHA-PAR = 2.0 Q-COMP = 32614
POINT 5 SIGMA = 45. V-REF = 200.34
COMPUTED FREQUENCY = 19.21, K = .1506
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	19	.134	200.19	6.598	195.14	3.895	190.44	2.516	182.16	1.914	163.03	1.813	132.52	2.023	109.42
2	3	.369	314.62	.163	143.83	.194	136.69	.191	130.59	.165	129.68	.126	109.53	.129	109.42
3	3	.129	71.55	.013	243.65	.056	38.06	.072	30.21	.066	9.01	.079	3.79	.055	322.28
4	5	.147	71.80	.044	216.60	.042	149.98	.009	187.35	.028	54.84	.073	334.61	.071	334.61
5	5	.138	121.98	.034	250.86	.048	264.78	.009	187.35	.050	81.05	.007	37.90	.071	334.61
6	7	.349	253.87	.013	184.04	.059	185.59	.083	177.42	.026	2.06	.016	96.27	.071	166.54
7	7	.073	189.93	.027	261.81	.063	311.92	.043	299.94	.029	158.31	.031	294.07	.014	350.58
8	9	.274	274.45	.050	331.26	.053	358.16	.036	325.53	.031	339.26	.037	.34	.046	350.58
9	9	.153	37.83	.041	193.84	.012	192.05	.018	281.41	.031	155.57	.020	208.99	.023	178.13
10	10	.068	315.38	.054	340.32	.036	28.52	.035	19.61	.049	3.18	.041	5.09	.021	178.13

X =	N	.774-UPPER CP-MAG	.860-UPPER CP-MAG	.910-UPPER CP-MAG	.012-LOWER CP-MAG	.062-LOWER CP-MAG	.148-LOWER CP-MAG	.261-LOWER CP-MAG							
1	2	.015	103.10	1.889	99.90	1.760	100.59	11.370	28.94	6.016	28.27	3.620	45.75	2.692	55.60
2	3	.149	69.15	.142	70.93	.134	178.80	.215	326.44	.358	235.41	.060	357.93	.054	102.49
3	3	.077	318.63	.061	323.47	.079	336.34	.133	278.85	.271	331.19	.047	300.29	.043	337.88
4	4	.005	278.42	.019	289.26	.021	301.73	.089	215.34	.271	223.89	.046	233.12	.036	227.76
5	5	.023	96.65	.059	132.48	.009	115.24	.142	188.88	.065	193.90	.012	164.95	.011	294.97
6	7	.030	161.02	.059	154.44	.072	160.74	.081	62.43	.101	176.81	.058	102.22	.050	114.01
7	7	.004	165.99	.016	91.94	.005	29.62	.048	58.64	.057	358.71	.017	170.61	.005	167.63
8	8	.042	5.59	.040	357.97	.041	350.87	.057	85.37	.040	109.18	.066	89.65	.063	101.60
9	9	.013	107.27	.029	99.66	.023	108.35	.071	156.10	.051	149.93	.059	174.51	.035	179.38
10	10	.013	60.35	.025	114.23	.012	199.80			.025					

X =	.392-LOWER CP-MAG	.530-LOWER CP-MAG	.661-LOWER CP-MAG	.774-LOWER CP-MAG	.860-LOWER CP-MAG	.910-LOWER CP-MAG
1	1.924	2.091	1.630	1.614	1.551	1.357
2	.092	.117	.160	.083	.079	.108
3	.061	.072	.053	.059	.076	.060
4	.023	.038	.004	.047	.035	.026
5	.026	.038	.032	.037	.019	.015
6	.016	.036	.014	.031	.017	.021
7	.034	.053	.014	.031	.026	.021
8	.004	.006	.018	.031	.036	.031
9	.053	.023	.018	.021	.033	.031
10	.016	.023	.018	.021	.033	.031

ORIGINAL PAGE IS
OF POOR QUALITY

WALL NO.	GAP FRACTION	N	W1 CPREAL	W1 CPIMAG	W2 CPREAL	W2 CPIMAG	W4 CPREAL	W4 CPIMAG	W6 CPREAL	W6 CPIMAG	W10 CPREAL	W10 CPIMAG
1	1.23	1	1.587	1.407	1.424	1.407	-8.557	-1.665	-2.148	309	-3.720	-5.694
2	1.22	2	1.440	1.283	1.339	1.283	-7.551	-1.296	-1.149	333	835	604
3	1.097	3	1.016	0.953	0.945	0.953	-3.385	0.319	0.443	000	032	046
4	1.000	4	1.000	0.921	0.909	0.921	-0.355	0.057	0.048	000	009	017
5	0.78	5	0.701	0.622	0.691	0.622	-0.112	0.024	-0.001	015	000	167
6	0.43	6	0.306	0.305	0.329	0.305	-0.072	-0.029	-0.065	007	162	078
7	0.24	7	0.110	0.053	0.07	0.053	-0.010	0.049	0.007	004	079	033
8	0.18	8	0.016	0.043	0.028	0.043	-0.034	-0.033	0.039	010	081	013
9	0.060	9	0.009	0.012	0.010	0.012	-0.049	-0.059	0.011	041	030	030
10		10			0.010				0.011	023	006	080

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 5 ALPHA-MCL = 2.0 POP RUN-PT 3.09
RUN 3 ALPHA-BAR = 2.0 Q-COMP = 32614
POINT 5 SIGMA = 45.0 V-REF = 200.34
COMPUTED FREQUENCY = 19.21, M = .1506
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE = 19.21, M = .1506
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	30.422	23.45	12.531	21.40	7.162	27.43	4.653	29.85	2.851	25.18	1.893	21.20
2	2.355	129.41	248.53	333.11	101.242	326.04	1.138	321.23	0.86	333.15	0.293	179.18
3	1.486	255.36	149.14	233.11	58.101	261.16	0.862	271.26	0.86	333.15	0.293	179.18
4	2.773	302.87	64.1	242.34	0.88	277.13	0.88	296.97	0.86	333.15	0.293	179.18
5	4.10	93.48	0.88	195.39	0.48	10.69	0.88	151.09	0.49	186.05	0.46	114.93
6	3.14	37.79	0.84	178.41	0.116	117.82	0.93	118.90	0.20	162.04	0.46	114.93
7	3.14	89.36	0.84	99.37	0.070	159.82	0.38	137.40	0.13	147.56	0.58	129.42
8	1.122	197.68	0.62	67.99	0.070	80.36	0.81	101.56	0.13	147.56	0.58	129.42
9	1.137	145.98	0.79	157.06	0.091	181.28	0.68	189.48	0.59	196.14	0.53	209.91
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X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	550	320.67	348	291.99	418	268.98	3	817	226.39	1.259	160.42	260.42
2	0.26	44.62	0.63	73.92	0.21	170.93	1	0.84	264.93	0.34	278.41	278.41
3	0.54	294.85	0.17	310.71	0.11	230.44	2	0.84	264.93	0.34	278.41	278.41
4	0.06	276.58	0.13	12.30	0.07	130.32	3	0.84	264.93	0.34	278.41	278.41
5	0.54	325.67	0.52	315.79	0.07	335.66	4	0.84	264.93	0.34	278.41	278.41
6	0.16	178.03	0.17	206.64	0.25	174.45	5	0.84	264.93	0.34	278.41	278.41
7	0.28	221.46	0.17	204.01	0.13	201.45	6	0.84	264.93	0.34	278.41	278.41
8	0.31	160.02	0.29	226.80	0.38	233.84	7	0.84	264.93	0.34	278.41	278.41
9							8	0.84	264.93	0.34	278.41	278.41
10							9	0.84	264.93	0.34	278.41	278.41
							10	0.84	264.93	0.34	278.41	278.41

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13
1	1.643	104.93	1.469	106.76	8.718	191.01	2.171	171.82	6.801	236.84	1.031	358.86
2	0.269	116.82	0.697	143.93	1.498	300.10	0.152	167.47	1.031	358.86	0.020	297.63
3	0.103	331.37	0.136	99.30	0.494	177.61	0.043	350.07	0.020	297.63	0.180	154.22
4	0.117	246.00	0.054	72.06	0.058	100.67	0.035	264.06	0.020	297.63	0.086	226.00
5	0.031	180.22	0.022	178.87	0.076	198.20	0.068	174.06	0.086	226.00	0.030	89.57
6	0.078	179.28	0.091	10.03	0.13	235.67	0.040	346.10	0.086	226.00	0.080	94.01
7	0.043	8.25	0.030	262.85	0.056	127.22	0.022	104.72	0.086	226.00		
8	0.024	336.59	0.051	123.30	0.076	309.60	0.025	63.90	0.086	226.00		
9	0.009	268.47	0.016	52.31	0.076	309.60			0.086	226.00		
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*** STABILITY PARAMETER ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13
1	1.643	104.93	1.469	106.76	8.718	191.01	2.171	171.82	6.801	236.84	1.031	358.86
2	0.269	116.82	0.697	143.93	1.498	300.10	0.152	167.47	1.031	358.86	0.020	297.63
3	0.103	331.37	0.136	99.30	0.494	177.61	0.043	350.07	0.020	297.63	0.180	154.22
4	0.117	246.00	0.054	72.06	0.058	100.67	0.035	264.06	0.020	297.63	0.086	226.00
5	0.031	180.22	0.022	178.87	0.076	198.20	0.068	174.06	0.086	226.00	0.030	89.57
6	0.078	179.28	0.091	10.03	0.13	235.67	0.040	346.10	0.086	226.00	0.080	94.01
7	0.043	8.25	0.030	262.85	0.056	127.22	0.022	104.72	0.086	226.00		
8	0.024	336.59	0.051	123.30	0.076	309.60	0.025	63.90	0.086	226.00		
9	0.009	268.47	0.016	52.31	0.076	309.60			0.086	226.00		
10												

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 19 ALPHA-MCL = 2.0 POP RUN-PT 6.05
RUN 6 ALPHA-RAR = 2.0 O-COMP = .32335
POINT 1 SIGMA = 90.0 V-REF = 199.40
COMPUTED FREQUENCY = 9.15, K = .0721

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	-20	.926	-.9147	-6.629	-1.215	-2.590	-2.129	-1.917	-1.632
2	20	.454	-.461	-.031	-.013	-.013	-.013	.031	.103
3	33	.633	-.659	.219	.169	.304	.352	.339	.313
4	44	.398	-.424	-.114	-.031	-.107	-.043	-.046	-.042
5	55	.028	-.092	.041	.030	.069	.043	.027	.041
6	66	-.098	.155	-.052	-.142	-.110	-.027	-.047	-.076
7	77	.104	-.104	.008	.023	.012	.027	.044	.012
8	88	.133	-.104	-.058	.033	-.029	.016	.019	.007
9	99	-.012	-.295	.000	-.028	-.021	.007	.015	-.017
10						.012			

X	N	CPREAL	CPIMAG	.062-LOWER	.148-LOWER	.261-LOWER	.392-LOWER	.530-LOWER	.661-LOWER
1	-1	.255	1.785	-.965	1.569	12.844	7.351	3.878	2.600
2	1	.114	-.173	.111	-.179	-.963	-.026	.039	-.032
3	3	.319	-.251	.333	.281	.265	.688	.305	.364
4	4	.051	-.029	.047	-.031	.021	.122	.021	.017
5	5	.021	.059	.024	.061	-.009	.096	.018	.018
6	6	-.067	-.154	.072	.162	.156	.153	.118	.108
7	7	.001	.028	.001	.030	.007	.011	.016	.024
8	8	.010	.074	.007	.066	.015	.061	.039	.076
9	9	.035	-.028	.037	.031	.025	.049	.030	.046
10	10	.020	-.009	.025	.007	.056	.061	.020	.006

X	N	CPREAL	CPIMAG	.530-LOWER	.661-LOWER	.774-LOWER	.860-LOWER	.910-LOWER
1	-1	.532	1.342	1.323	1.361	.429	-.048	-.224
2	1	.291	-.245	-.052	-.186	.066	-.200	-.104
3	3	.057	-.023	.016	.014	-.030	.273	.356
4	4	-.031	.050	.066	.066	.023	.050	.066
5	5	-.081	.146	.027	.066	.023	.018	.035
6	6	-.013	.020	.020	.174	-.058	.068	.078
7	7	.034	-.015	.005	.034	.012	.004	.013
8	8	.015	-.005	.014	.022	.035	.004	.010
9	9	.011	-.005	.014	.022	.035	.004	.010
10	10	.011	-.005	.014	.022	.035	.004	.010

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 19 ALPHA-MCL = 2.0 PDP RUN-PT 6.05
 RUN 6 ALPHA-BAR = 2.0 Q-COMP = 32335
 POINT 1 ALPHA-SIGMA = 90.0 V-REF = 199.40
 COMPUTED FREQUENCY = 9.15. K = .0721

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	21.815	196.37	6.740	190.18	3.852	124.35	2.603	174.20	2.286	158.02	2.459	141.33
2	1.243	303.33	.205	261.18	.201	263.47	.210	266.40	.231	268.65	.261	278.70
3	1.067	330.62	.277	37.628	.382	42.33	.406	41.61	.453	38.96	.461	42.72
4	.693	87.79	.050	36.13	.134	186.93	.107	185.27	.085	194.71	.084	202.34
5	.184	237.96	.152	249.81	.052	255.88	.075	165.45	.109	67.06	.073	68.10
6	.377	204.22	.024	108.08	.187	238.12	.186	233.91	.186	240.79	.157	254.41
7	.230	196.56	.094	92.29	.002	104.12	.024	121.01	.064	115.20	.038	97.84
8	.139	267.60	.067	209.95	.081	95.48	.060	117.58	.070	102.96	.039	79.02
9	.296		.028	270.44	.015	322.48	.043	240.96	.056	199.95	.040	229.26
10							.028	294.30	.033	281.93	.015	343.26

N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.187	125.12	1.819	121.45	1.487	118.85	1.331	22.79	1.947	22.78	4.598	31.91
2	.406	303.25	.436	40.15	.427	294.51	.377	305.26	1.199	268.83	.278	278.10
3	.069	209.19	.065	213.35	.055	203.44	.031	45.41	.446	259.50	.411	42.16
4	.168	246.90	.177	246.11	.068	68.95	.029	107.05	.155	37.71	.030	44.32
5	.075	82.38	.030	93.93	.172	92.25	.219	224.56	.349	254.42	.030	233.06
6	.045	218.91	.066	81.55	.032	83.14	.021	68.88	.059	100.42	.021	233.06
7	.022	335.91	.026	343.41	.047	330.18	.031	301.94	.070	375.84	.040	276.73
8					.027	330.18	.068	143.01	.052	110.97	.023	202.96
9												
10												

N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.036	41.21	1.897	45.87	1.174	58.78	1.019	65.08	.592	94.89	.757	107.26
2	.375	254.95	.440	267.17	.320	284.56	.282	283.78	.448	313.50	.420	256.70
3	.061	201.65	.077	190.18	.138	162.81	.055	41.78	.052	32.99	.061	32.03
4	.167	240.94	.203	167.83	.109	177.40	.058	68.43	.083	177.59	.061	204.96
5	.039	120.51	.039	124.25	.189	229.55	.190	252.15	.140	248.40	.177	243.81
6	.037	204.54	.059	90.95	.060	103.94	.036	119.91	.048	108.88	.027	118.40
7	.011	331.47	.015	344.69	.045	203.99	.046	176.65	.046	225.75	.063	222.17
8							.029	329.96	.017	339.19	.023	339.19
9												
10												

ORIGINAL PAGE IS
 OF POOR QUALITY

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ACNT PERIODICITY TEST
MODE 1 --- CENTER BLADE DATA, WALL STATIONS

FILE 19 ALPHA-VCL = 2.0 PDP RUN.PT 6.0E
RUN 6 ALPHA-PAR = 2.0 Q-COMP = .32335
POINT 1 SIGMA = 90. V-REF = 199.40
COMPUTED FREQUENCY = 9.15, K = .9721

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	X	\bar{x}	σ^2	σ	DELCP	DELCP	σ^2	σ	DELCP	DELCP	σ^2	σ	DELCP	DELCP	σ^2	σ	DELCP	DELCP	σ^2	σ
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15						

X	N	DELCPR	DELCP	DELCP ⁷⁷⁴	DELCP ^{P60}	DELCP ⁹¹⁰	N	CNREAL	CNIWAG	N	CMREAL	CMIWAG
1	1	1.685	-.866	-.916	-1.1002	-.493	1	4.904	-.857	1	1.271	-.519
2	2	1.698	-.101	-.682	-1.0375	-.198	2	-.082	-.005	2	-.011	-.012
3	3	1.694	-.002	-.663	-.975	-.230	3	-.017	-.002	3	-.004	-.002
4	4	1.682	-.017	-.635	-.915	-.316	4	-.030	-.018	4	-.009	-.011
5	5	1.671	-.006	-.606	-.850	-.411	5	-.044	-.035	5	-.002	-.010
6	6	1.659	-.027	-.577	-.781	-.503	6	-.017	-.025	6	-.008	-.005
7	7	1.647	-.043	-.548	-.707	-.602	7	-.014	-.035	7	-.008	-.003
8	8	1.634	-.062	-.518	-.631	-.701	8	-.013	-.040	8	-.003	-.003
9	9	1.621	-.086	-.487	-.552	-.795	9	-.005	-.041	9	-.003	-.008
10	10	1.608	-.111	-.456	-.471	-.880	10	-.003	-.043	10	-.003	-.008

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

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WALL NO.      W1      W2      W4      W6      W10
GAP FRACTION  N  CPREAL CPIMAG  CPREAL CPIMAG  CPREAL CPIMAG
          * XI = -.5359 *
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FILE - ALPHA-WCL = 2.0 POP RUN-PT 6.05
RUN 6 ALPHA-PAR = 2.0 Q-COMP = .3235
POINT 1 SIGMA = 90. V-REF = 199.40
COMPUTED FREQUENCY = 9.15 K = .0721

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
 COMPIRED FREQUENCY = 9.13 K

X	°012		°062		°149		°261		°392		°530		°661	
	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM
1	35.688	18.87	14.665	16.95	8.180	19.32	5.439	17.43	3.684	7.58	3.244	356.83	2.426	337.48
2	2.574	125.38	.996	270.33	.097	399.51	.063	112.46	.090	101.27	.036	117.80	.147	141.63
3	.696	288.07	.492	17.66	.030	40.07	.051	17.00	.080	209.67	.024	253.88	.048	194.45
4	.427	151.80	.409	274.48	.122	352.45	.063	342.72	.025	357.78	.002	156.48	.089	139.07
5	.665	177.93	.104	38.48	.023	250.77	.041	250.72	.034	248.28	.002	256.32	.034	196.16
6	.058	137.93	.192	257.39	.019	191.42	.006	334.58	.041	59.99	.017	160.05	.057	148.97
7	.366	37.64	.032	296.69	.227	292.32	.006	56.7	.034	301.17	.042	243.16	.010	221.93
8	.207	20.79	.038	76.93	.044	129.61	.075	168.18	.019	83.58	.017	147.14	.032	110.59
9	.123	28.29	.012	32.41	.026	153.48	.027	102.18	.027	81.49	.030	100.24	.017	183.75
10	.340	78.40			.014	1.00			.027					

[illegible]

*** WALL PRESSURE, PER RADIAN ***

WALL NO. GAP FRACTION	W1 --.125 CP-MAG	PHI	W2 --.00C CP-MAG	PHI	W4 --.125 CP-MAG	PHI	W6 --.500 CP-MAG	PHI	W10 --.125 CP-MAG	PHI	* XI = --.5359 *****
1	2.379	58.17	1.942	63.40	9.058	187.34	2.143	165.79	6.489	240.55	
2	1.130	274.63	1.474	141.07	2.285	290.15	.380	265.40	1.095	128.54	
3	.525	44.85	.743	149.93	.866	39.27	.495	46.70	.437	157.48	
4	.174	227.08	.094	165.14	.116	193.27	.088	225.89	.044	192.11	
5	.071	80.32	.086	135.23	.149	48.50	.036	238.26	.044	127.1	
6	.246	237.03	.270	163.32	.217	229.81	.212	238.68	.158	117.87	
7	.005	143.32	.012	232.39	.100	113.96	.026	99.03	.092	57.57	
8	.784	78.46	.060	87.33	.094	196.52	.061	209.55	.008	58.97	
9	.046	205.97	.080	203.37	.122	176.09	.073	142.13	.070	245.95	
10	.040	33.44	.041	22.89	.038	235.48	.038	142.13	.007	36.95	

*** STABILITY PARAMETER

★ ★ ★
★ XI = -.5359 ★ ★ ★
★ ★ ★

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 21 ALPHA-MCL = 2.0 POP RUN.PT 6.07
RUN 6 ALPHA-RAR = 2.0 O-COMP = .32585
POINT 3 SIGMA = 90. V-REF = 200.18
COMPUTED FREQUENCY = 15.57, K = .1222
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	2	-21.021	-5.596	-3.939	-2.677	-2.236	-2.025	-1.713
2	3	-2.452	-3.283	-1.178	.194	.204	.242	.302
3	4	-6.27	-6.91	.045	.036	.053	.034	.012
4	5	-6.64	-7.06	.081	.084	.119	.109	.125
5	6	-0.64	-0.706	.020	.077	.122	.033	.107
6	7	-1.139	-0.247	.011	-.034	.005	.027	.003
7	8	-1.136	-0.253	.057	.006	-.007	.025	.003
8	9	-1.136	-0.253	.021	-.042	.048	.011	.006
9	10	-0.47	-0.24	.008	-.006	.011	.007	.004
10		-0.001	-0.198	.015	-.009	.006	.004	.001

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	2	-1.352	-1.076	-844	12.883	7.071	3.784	2.452
2	3	-0.310	-0.217	-310	-1.056	-1.140	-0.255	-0.210
3	4	-0.034	-0.034	-0.040	-0.075	-0.257	-0.001	-0.049
4	5	-0.113	-0.029	-0.121	-0.083	-0.136	-0.117	-0.142
5	6	-0.102	-0.014	-0.110	-0.083	-0.162	-0.100	-0.005
6	7	-0.026	-0.022	-0.011	-0.055	-0.222	-0.010	-0.002
7	8	-0.006	-0.014	-0.005	-0.044	-0.222	-0.006	-0.007
8	9	-0.006	-0.010	-0.003	-0.024	-0.222	-0.003	-0.004
9	10	-0.006	-0.007	-0.003	-0.017	-0.222	-0.002	-0.004

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.850-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	1.419	1.176	.485	.279	-.261	.323
2	2	.186	-.204	-.227	-.273	.323	-.075
3	3	.085	-.114	-.082	-.034	.323	-.014
4	4	.074	.095	-.096	.137	.127	.119
5	5	.024	.007	-.066	.085	.057	.055
6	6	-.010	-.012	-.004	.014	-.005	.006
7	7	-.009	-.006	-.001	-.003	-.007	.002
8	8	-.004	.015	.005	.003	.006	.004
9	9	.007	.012	.011	.020	.004	.004
10	10			.001	.015	.007	.009

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 21 ALPHA-MCL = 2.0 PDP RUN-PT 6.07
RUN 6 ALPHA-BAR = 2.0 Q-COMP = .32585
POINT 3 SIGMA = 90.0 V-REF = 200.18
COMPUTED FREQUENCY = 15.57, N = .1222
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

N	X = .012-UPPER CP-MAG	PHI	860-UPPER CP-MAG	PHI	910-UPPER CP-MAG	PHI	012-LOWER CP-MAG	PHI	062-LOWER CP-MAG	PHI	392-UPPER CP-MAG	PHI	530-UPPER CP-MAG	PHI	661-UPPER CP-MAG	PHI
1	21.753	194.91	6.872	191.03	3.974	187.59	2.678	181.42	7.436	18.04	2.281	168.60	2.303	151.56	2.281	138.67
2	4.053	106.76	.263	40.71	.264	42.43	.261	41.75	.554	18.34	.269	40.79	.290	31.24	.349	30.29
3	.023	47.81	.036	213.58	.047	57.51	.058	51.89	.217	34.18	.064	39.38	.044	50.92	.023	238.14
4	.051	353.29	.026	229.56	.108	48.41	.120	45.25	.268	34.79	.136	29.00	.170	6.07	.131	17.19
5	.009	84.90	.052	328.08	.065	338.27	.078	5.25	.168	22.35	.126	13.82	.110	358.68	.107	278.15
6	.146	198.63	.020	340.47	.029	202.72	.034	173.28	.029	22.35	.026	285.31	.047	302.36	.022	297.81
7	.245	123.74	.043	260.50	.062	268.63	.043	262.58	.061	22.35	.036	149.53	.023	241.45	.019	253.09
8	.312	198.56	.020	163.27	.028	288.92	.040	199.58	.061	22.35	.037	73.35	.023	92.45	.016	129.81
9	.053	332.87	.031	106.99	.010	28.92	.010	232.58	.030	300.46	.014	234.87	.004	6.20	.004	8.18
10	.138	269.69	.009	24.93	.021	44.00	.009	256.67	.030	300.46						

N	X = .774-UPPER CP-MAG	PHI	860-UPPER CP-MAG	PHI	910-UPPER CP-MAG	PHI	012-LOWER CP-MAG	PHI	062-LOWER CP-MAG	PHI	392-UPPER CP-MAG	PHI	530-UPPER CP-MAG	PHI	661-UPPER CP-MAG	PHI
1	1.926	134.60	1.582	132.23	1.291	130.14	13.77	12.00	7.436	18.04	2.281	168.60	2.303	151.56	2.281	138.67
2	.015	282.45	.014	350.75	.004	23.13	.132	20.93	.554	18.34	.269	40.79	.290	31.24	.349	30.29
3	.105	16.65	.130	16.62	.123	10.41	.075	3.59	.217	34.18	.064	39.38	.044	50.92	.023	238.14
4	.015	11.15	.114	15.42	.113	15.43	.084	357.22	.268	34.79	.126	13.82	.170	6.07	.131	17.19
5	.015	318.00	.022	222.02	.017	209.16	.015	19.16	.168	22.35	.126	13.82	.110	358.68	.107	278.15
6	.017	248.89	.019	256.52	.023	260.91	.015	269.14	.029	22.35	.026	285.31	.047	302.36	.022	297.81
7	.010	111.56	.020	119.50	.013	143.60	.044	269.14	.061	22.35	.036	149.53	.023	241.45	.019	253.09
8	.008	311.56	.011	322.00	.006	297.42	.019	26.26	.030	300.46			.004	6.20	.004	8.18

N	X = .392-LOWER CP-MAG	PHI	530-LOWER CP-MAG	PHI	661-LOWER CP-MAG	PHI	774-LOWER CP-MAG	PHI	860-LOWER CP-MAG	PHI	910-LOWER CP-MAG	PHI	530-LOWER CP-MAG	PHI	661-LOWER CP-MAG	PHI
1	1.876	40.11	1.679	43.52	1.013	61.39	.932	70.39	.932	115.61	.706	117.25	.706	117.25	.706	117.25
2	.009	57.62	.005	228.24	.082	181.90	.038	206.03	.335	23.29	.043	63.57	.043	63.57	.043	63.57
3	.005	2.02	.116	12.01	.119	36.12	.133	351.52	.128	4.83	.120	2.47	.120	2.47	.120	2.47
4	.005	29.91	.104	23.08	.071	37.12	.109	286.52	.114	4.83	.120	2.47	.120	2.47	.120	2.47
5	.005	248.89	.029	255.52	.021	120.89	.025	267.99	.029	255.52	.029	255.52	.029	255.52	.029	255.52
6	.008	109.53	.047	110.64	.024	139.69	.006	193.67	.006	193.67	.006	193.67	.006	193.67	.006	193.67
7	.005	297.81	.019	311.75	.011	311.75	.025	323.67	.008	301.69	.008	301.69	.008	301.69	.008	301.69

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 21 ALPHA-MCL = 2.0 PDP RUN PT 6.07
RUN 6 ALPHA-RAR = 2.0 O-COMP = .32585
POINT 3 SIGMA = 90. V-REF = 200.18
COMPUTED FREQUENCY = 15.57, K = .1222

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR
1	33.904	10.287	13.816	3.617	7.723	2.650	5.129
2	1.396	2.201	1.340	1.708	1.015	1.749	1.017
3	1.721	1.728	1.287	1.058	1.014	1.035	1.027
4	1.572	1.081	1.246	1.211	1.045	1.110	1.034
5	1.019	1.710	1.114	1.015	1.017	1.022	1.051
6	1.120	1.008	1.114	1.096	1.017	1.016	1.009
7	1.150	1.198	1.034	1.053	1.001	1.002	1.017
8	1.295	1.055	1.003	1.063	1.024	1.031	1.042
9	1.071	1.005	1.003	1.016	1.008	1.014	1.009
10	1.018	1.206	1.007	1.029	1.008	1.014	1.015
11	1.012	1.012	1.012	1.012	1.012	1.012	1.012

X =	.774	.860	.910	.965	.965	.965	.965
N	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR
1	1.631	1.588	1.588	1.588	1.588	1.588	1.588
2	1.037	1.037	1.037	1.037	1.037	1.037	1.037
3	1.038	1.038	1.038	1.038	1.038	1.038	1.038
4	1.038	1.038	1.038	1.038	1.038	1.038	1.038
5	1.038	1.038	1.038	1.038	1.038	1.038	1.038
6	1.038	1.038	1.038	1.038	1.038	1.038	1.038
7	1.038	1.038	1.038	1.038	1.038	1.038	1.038
8	1.038	1.038	1.038	1.038	1.038	1.038	1.038
9	1.038	1.038	1.038	1.038	1.038	1.038	1.038
10	1.038	1.038	1.038	1.038	1.038	1.038	1.038

*** STABILITY PARAMETER ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
GAP FRACTION	1	2	3	4	5	6	7	8	9	10	11	12
1	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
2	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
3	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
4	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
5	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
6	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
7	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
8	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
9	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
10	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
GAP FRACTION	1	2	3	4	5	6	7	8	9	10	11	12
1	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
2	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
3	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
4	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
5	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
6	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
7	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
8	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
9	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001
10	1.064	1.599	1.391	1.313	1.111	1.001	1.001	1.001	1.001	1.001	1.001	1.001

* XI = -.735 *

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 21 ALPHA-MCL = 2.0 PPR RUN-PT 6.07
RUN 6 ALPHA-PAP = 2.0 Q-COMP = .32585
POINT 3 SIGMA = 90. V-DEF = 200.18
COMPUTED FREQUENCY = 15.57, K = .1222

*** SLADE PRESSURES, AMPLITUDE AND PHASE ANGLE, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	35.430	16.88	14.282	14.667	8.165	18.94	5.419	18.83	3.730	11.51	3.202	1.83
2	2.077	122.39	.785	248.37	.104	305.51	.030	66.13	.032	122.97	.079	81.03
3	1.087	225.24	.292	248.60	.027	189.77	.030	296.67	.056	210.88	.049	230.62
4	.577	171.95	.338	223.16	.110	294.12	.124	297.74	.071	241.58	.056	173.67
5	.710	251.70	.115	220.74	.015	316.62	.040	146.89	.051	181.53	.047	198.79
6	.249	307.12	.147	220.74	.023	316.62	.053	317.91	.031	178.31	.025	176.95
7	.301	176.13	.063	267.33	.148	88.75	.044	35.33	.044	178.41	.037	188.19
8	.071	176.13	.817	286.32	.010	234.53	.017	56.11	.012	254.30	.066	336.52
9	.207	85.05	.030	283.50	.035	282.48	.035	337.00	.015	354.74	.018	301.95
10												

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	1.734	340.12	1.037	321.81	.627	326.16	.242	326.16	.967	11.20	1.358	20.96
2	.038	183.24	.025	277.09	.046	243.30	.008	260.96	.049	233.42	.023	138.37
3	.037	118.43	.024	103.16	.037	136.75	.019	284.01	.061	175.02	.018	222.21
4	.038	176.00	.009	215.19	.019	284.01	.012	225.48	.020	166.06	.013	291.07
5	.039	192.28	.031	195.33	.033	313.25	.005	322.37	.031	241.74	.006	279.06
6	.039	274.74	.017	308.06	.005	322.37			.049	241.74	.002	338.72
7	.037	329.68							.012	340.74	.002	170.28
8												
9												
10												

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	1.920	56.36	1.531	62.37	9.153	187.89	2.174	174.30	6.963	280.51	1.369	280.51
2	.037	51.28	.176	89.74	1.860	38.17	.255	126.75	1.369	133.55	.049	133.55
3	.038	82.81	.151	26.07	.230	38.17	.073	126.75	.255	11.50	.258	11.50
4	.135	358.94	.100	13.03	.182	33.96	.145	15.28	.158	108.27	.141	108.27
5	.114	275.01	.052	304.01	.057	175.97	.058	268.19	.141	280.09	.061	280.09
6	.034	268.62	.353	287.94	.037	217.69	.058	268.19	.085	271.72	.085	271.72
7	.025	204.46	.013	146.52	.045	110.34	.048	178.29	.048	102.68	.048	102.68
8	.017	134.23	.013	146.52	.045	110.34	.048	178.29	.048	102.68	.048	102.68
9	.037	288.68	.049	293.92	.021	158.55	.015	312.77	.028	280.66		
10												

*** STABILITY PARAMETER

* XI = -.8735 *
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ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 23 ALPHA-MCL = 2.0 PDP RUN-PT 6.09
RUN 6 ALPHA-FAR = 2.0 O-COMP = .32940
POINT 5 SIGMA = 90. V-REF = 201.26
COMPUTED FREQUENCY = 19.21 K = .1499

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	21	1.177	-4.982	-6.966	-2.843	-2.395	-2.198	-1.848
2	156	1.156	-3.294	-1.047	-0.555	-0.070	-0.059	1.478
3	160	1.150	-1.615	-0.098	-0.087	-0.060	-0.075	1.160
4	160	1.150	-1.615	-0.098	-0.087	-0.060	-0.075	1.160
5	160	1.150	-1.615	-0.098	-0.087	-0.060	-0.075	1.160
6	160	1.150	-1.615	-0.098	-0.087	-0.060	-0.075	1.160
7	160	1.150	-1.615	-0.098	-0.087	-0.060	-0.075	1.160
8	160	1.150	-1.615	-0.098	-0.087	-0.060	-0.075	1.160
9	160	1.150	-1.615	-0.098	-0.087	-0.060	-0.075	1.160
10	160	1.150	-1.615	-0.098	-0.087	-0.060	-0.075	1.160

X	N	.778-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
2	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
3	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
4	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
5	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
6	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
7	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
8	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
9	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373
10	1	1.479	1.720	-1.014	12.953	6.963	3.688	2.373

X	N	.392-LOWER CPREAL CPIMAG	.510-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.778-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	1.479	1.720	-1.014	12.953	6.963	3.688
2	1	1.479	1.720	-1.014	12.953	6.963	3.688
3	1	1.479	1.720	-1.014	12.953	6.963	3.688
4	1	1.479	1.720	-1.014	12.953	6.963	3.688
5	1	1.479	1.720	-1.014	12.953	6.963	3.688
6	1	1.479	1.720	-1.014	12.953	6.963	3.688
7	1	1.479	1.720	-1.014	12.953	6.963	3.688
8	1	1.479	1.720	-1.014	12.953	6.963	3.688
9	1	1.479	1.720	-1.014	12.953	6.963	3.688
10	1	1.479	1.720	-1.014	12.953	6.963	3.688

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 23 ALPHA-MCL = 2.0 POP RUN.PT 6.09
RUN 6 ALPHA-BAR = 2.0 Q-COMP = 32940
POINT 5 SIGMA = 90. V-REF = 201.28
COMPUTED FREQUENCY = 19.21, K = .1499

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
** BLADE PRESSURES, PER RADIAN **

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	21	726	193.26	7.024	187.35	4.141	182.29	2.858	134.29	2.527	161.43	2.649	146.09	2.647	134.27
2	3	937	303.23	.185	104.62	.205	106.00	.199	106.00	.204	110.08	.178	109.22	.191	188.19
3	768	211.79	.098	358.22	.104	202.66	.074	216.42	.074	216.42	.074	.082	204.29	.148	214.48
4	651	345.78	.006	120.17	.053	20.36	.063	24.89	.091	10.93	.139	.139	332.26	.103	352.10
5	807	85.74	.022	194.15	.009	202.44	.020	85.07	.051	64.16	.005	.010	254.31	.047	192.59
6	101	181.28	.022	233.54	.050	154.99	.062	148.11	.020	149.58	.014	.014	346.35	.010	121.30
7	347	136.48	.022	305.95	.034	259.82	.014	228.06	.023	149.58	.019	.019	313.87	.046	326.31
8	182	280.10	.084	336.38	.077	288.08	.076	186.64	.058	310.91	.072	.072	359.39	.011	311.49
9	319	281.47				.081	357.77	.047	352.59						
10															

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	268	130.69	2.029	127.60	1.747	125.48	13.002	21.30	7.361	21.18	4.522	35.36	3.232	42.86
2	205	83.22	.124	217.57	.116	213.43	.106	193.72	.124	216.71	.112	.112	80.36	.249	100.50
3	132	218.36	.087	353.82	.107	249.77	.084	247.53	.084	247.53	.084	.084	177.18	.119	178.27
4	687	97.81	.021	197.13	.050	195.16	.021	188.73	.021	188.73	.021	.021	190.96	.021	130.23
5	021	192.81	.022	105.92	.011	198.75	.011	175.07	.011	175.07	.011	.011	299.09	.029	137.91
6	008	106.73	.022	204.31	.021	203.72	.021	188.73	.021	188.73	.021	.021	208.40	.029	210.52
7	010	320.02	.056	340.23	.041	340.23	.041	340.23	.041	340.23	.041	.041	193.60	.020	207.15
8	013	326.87				.013	296.17	.039	145.76			.067	193.60	.059	208.21
9															
10															

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	124	58.57	2.070	60.50	1.483	77.35	1.335	86.65	1.270	99.83	1.277	113.63	1.260	130.78
2	213	98.57	.094	204.31	.087	188.03	.087	188.03	.087	188.03	.087	.087	209.96	.087	209.96
3	094	201.42	.069	345.79	.069	156.07	.069	156.07	.069	156.07	.069	.069	123.34	.069	123.34
4	019	120.17	.061	118.69	.061	118.69	.061	118.69	.061	118.69	.061	.061	261.52	.061	261.52
5	010	288.08	.019	133.83	.019	133.83	.019	133.83	.019	133.83	.019	.019	277.50	.019	277.50
6	034	337.83	.021	318.49	.021	318.49	.021	318.49	.021	318.49	.021	.021	308.00	.021	308.00
7	008	337.83	.021	318.49	.021	318.49	.021	318.49	.021	318.49	.021	.021	308.00	.021	308.00
8	027	223.80				.017	275.61	.031	316.03			.042	332.65	.042	332.65
9															
10															

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PRIORITY TEST
CENTER BLADE DATA, WALL STATIONS

MODE 1 --

FILE 23 ALPHA-MCL = 2.0 POP RUN-PT 6.09
HUN 6 ALPHA-PAR = 2.0 Q-COMP = 32946
POINT 5 SIGMA = 90 V-REF = 201.28
COMPUTED FREQUENCY = 19.21, K = 1499

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.062		.148		.261		.392		.530		.661	
		DELCPR	DELCPY	DELCPR	DELCPY	DELCPR	DELCPY	DELCPR	DELCPY	DELCPR	DELCPY	DELCPR	DELCPY
1	34	100	100	13	937	5	217	1	918	3	685	883	000
2	1	337	2	219	006	7	826	2	782	1	918	037	030
3	1	599	0	640	006	0	017	0	037	0	037	030	030
4	1	663	0	073	006	0	016	0	034	0	034	030	030
5	1	098	0	848	006	0	013	0	034	0	034	030	030
6	1	052	0	113	006	0	013	0	034	0	034	030	030
7	1	256	0	125	006	0	013	0	034	0	034	030	030
8	1	296	0	357	006	0	013	0	034	0	034	030	030
9	1	030	0	116	006	0	013	0	034	0	034	030	030
10	1	137	0	363	006	0	013	0	034	0	034	030	030

X	N	.800		.910		.910		.910		.910		.910	
		DELCPR	DELCPY	DELCPR	DELCPY	DELCPR	DELCPY	DELCPR	DELCPY	DELCPR	DELCPY	DELCPR	DELCPY
1	1	557	0	367	006	0	013	0	034	0	034	030	030
2	1	034	0	018	006	0	013	0	034	0	034	030	030
3	1	019	0	056	006	0	013	0	034	0	034	030	030
4	1	001	0	002	006	0	013	0	034	0	034	030	030
5	1	001	0	002	006	0	013	0	034	0	034	030	030
6	1	001	0	002	006	0	013	0	034	0	034	030	030
7	1	001	0	002	006	0	013	0	034	0	034	030	030
8	1	001	0	002	006	0	013	0	034	0	034	030	030
9	1	001	0	002	006	0	013	0	034	0	034	030	030
10	1	001	0	002	006	0	013	0	034	0	034	030	030

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	.125		.125		.125		.125		.125		.125	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	835	2	069	006	0	013	0	034	0	034	030	030
2	1	002	0	013	006	0	013	0	034	0	034	030	030
3	1	002	0	013	006	0	013	0	034	0	034	030	030
4	1	002	0	013	006	0	013	0	034	0	034	030	030
5	1	002	0	013	006	0	013	0	034	0	034	030	030
6	1	002	0	013	006	0	013	0	034	0	034	030	030
7	1	002	0	013	006	0	013	0	034	0	034	030	030
8	1	002	0	013	006	0	013	0	034	0	034	030	030
9	1	002	0	013	006	0	013	0	034	0	034	030	030
10	1	002	0	013	006	0	013	0	034	0	034	030	030

*** STABILITY PARAMETER

* XI = -.4610 *

CO-POLED FREQUENCY - 19.21, A -
FOURIFR COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NUPHEL FORCE, AND MOMENT, PER RADIAN ***

x =	.012	.052	.142	.261
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1974-1975

187

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 25 ALPHA-MCL = 2.0 PDP RUN-PT 7.04
RUN 1 ALPHA-EP = 2.0 C-COMP = 3282C
POINT 1 SIGMA = 135. V-REF = 200.93
COMPUTED FREQUENCY = 9.16, K = .0716

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	24	0.661	-3.659	-7.524	-0.566	-4.391	-0.015	-3.123	-0.334	-2.808	-0.754	-2.939	1.245	-2.083	1.518	-2.083	1.518
2	1	0.466	-4.560	-0.131	-0.335	-0.135	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
3	3	0.519	-4.290	-0.098	-0.336	-0.098	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
4	5	0.594	-4.698	-0.062	-0.336	-0.062	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
5	7	0.577	-4.135	-0.028	-0.336	-0.028	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
6	9	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
7	11	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
8	13	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
9	15	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
10	17	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	24	0.661	-3.659	-7.524	-0.566	-4.391	-0.015	-3.123	-0.334	-2.808	-0.754	-2.939	1.245	-2.083	1.518	-2.083	1.518
2	1	0.466	-4.560	-0.131	-0.335	-0.135	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
3	3	0.519	-4.290	-0.098	-0.336	-0.098	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
4	5	0.594	-4.698	-0.062	-0.336	-0.062	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
5	7	0.577	-4.135	-0.028	-0.336	-0.028	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
6	9	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
7	11	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
8	13	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
9	15	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
10	17	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	24	0.661	-3.659	-7.524	-0.566	-4.391	-0.015	-3.123	-0.334	-2.808	-0.754	-2.939	1.245	-2.083	1.518	-2.083	1.518
2	1	0.466	-4.560	-0.131	-0.335	-0.135	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
3	3	0.519	-4.290	-0.098	-0.336	-0.098	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
4	5	0.594	-4.698	-0.062	-0.336	-0.062	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
5	7	0.577	-4.135	-0.028	-0.336	-0.028	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
6	9	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
7	11	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
8	13	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
9	15	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026
10	17	0.577	-4.367	-0.019	-0.336	-0.019	-0.025	-0.123	-0.024	-0.155	-0.054	-0.150	-0.110	-0.110	-0.026	-0.110	-0.026

MODE 1 -- OCVI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 25 ALPHA-MCL = 2.0 PDP RUN.PT 7.04
RUN 7 ALPHA-MAR = 135.0 Q-COMP = 32820
POINT 1 SIGMA = 135.0 V-REF = 200.93
COMPUTED FREQUENCY = 9.16, K = .0716
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	128	188.37	7.545	184.30	4.391	180.19	3.141	173.89	2.907	164.97	3.192	157.04	3.258	152.24
2	4	809	287.75	13.3	194.90	1.137	190.52	1.126	191.07	1.164	199.06	1.186	216.12	1.113	193.41
3	4	595	29.22	105	200.35	0.023	85.90	0.037	64.30	0.048	42.23	0.058	122.12	0.045	181.03
4	9	17	310.42	0.078	322.13	0.078	322.04	0.078	322.04	0.078	322.04	0.078	322.04	0.078	322.04
5	4	675	47.01	0.021	207.82	0.015	99.75	0.014	59.80	0.014	45.72	0.014	33.75	0.014	65.37
6	4	146	293.01	0.022	238.87	0.014	321.79	0.014	321.79	0.014	321.79	0.014	321.79	0.014	321.79
7	4	404	64.05	0.027	315.84	0.014	321.79	0.014	321.79	0.014	321.79	0.014	321.79	0.014	321.79
8	4	255	159.39	0.019	10.01	0.003	276.59	0.008	138.63	0.025	309.18	0.033	316.93	0.026	309.76
9	4	229	84.39	0.044	242.29	0.042	254.44	0.027	250.75	0.007	32.42	0.022	270.18	0.047	309.76
10	4	243	188.95	0.023	289.47	0.020	270.42	0.024	204.13	0.018	239.85	0.032	293.26	0.026	290.65

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	735	149.15	2.199	145.92	1.796	147.34	1.633	13.20	9.201	12.55	5.215	21.11	3.607	25.45
2	4	105	140.51	1.028	145.50	0.034	140.09	0.058	167.13	0.517	241.69	0.080	43.22	0.166	135.76
3	4	114	312.92	1.145	312.70	0.121	311.69	0.094	308.98	0.372	241.27	0.160	108.47	0.119	45.40
4	4	049	333.46	0.052	330.50	0.048	321.15	0.073	308.43	0.191	241.27	0.045	108.47	0.052	309.91
5	4	028	313.71	0.030	313.72	0.048	321.15	0.067	308.43	0.157	241.27	0.045	108.47	0.071	307.33
6	4	032	254.94	0.047	258.10	0.025	252.32	0.108	311.94	0.119	275.91	0.067	108.47	0.071	307.33
7	4	017	285.24	0.019	287.71	0.021	276.89	0.051	205.34	0.087	269.45	0.049	222.69	0.031	211.92

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	216	31.48	1.881	38.09	1.180	53.93	1.016	65.07	0.391	101.55	0.719	112.76	0.466	112.76
2	4	138	124.23	1.143	170.03	1.133	138.43	0.068	195.29	0.151	318.26	0.066	201.27	0.047	201.27
3	4	091	311.34	0.050	320.13	0.073	311.03	0.135	302.50	0.147	306.59	0.096	201.27	0.047	201.27
4	4	042	306.67	0.042	295.47	0.040	126.86	0.039	89.01	0.053	294.62	0.019	107.61	0.019	107.61
5	4	026	323.59	0.041	322.43	0.017	49.71	0.027	16.49	0.046	219.42	0.019	107.61	0.019	107.61
6	4	040	257.06	0.055	322.43	0.028	345.77	0.064	309.53	0.036	312.58	0.042	319.16	0.042	319.16
7	4	025	225.61	0.020	236.02	0.014	194.70	0.034	260.84	0.035	262.52	0.033	272.27	0.023	272.27

ORIGINAL PART OF POOR QUALITY.

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTF ELADE DATA, WALL STATIONS

FILE 25 ALPHA-MCL = 2.0 PDP RUN-PT 7.04
RUN 7 ALPHA-PAR = 2.0 Q-COMP = 32820
POINT 1 SIGMA = 135. V-REF = 200.93
COMPUTED FREQUENCY = 9.16, K = .0716
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.424	10.27	16.702	3.44	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
2	1.882	107.19	16.702	254.32	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
3	1.882	204.15	16.702	347.92	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
4	1.882	130.86	16.702	229.15	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
5	1.882	221.60	16.702	349.55	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
6	1.882	102.89	16.702	214.25	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
7	1.882	192.16	16.702	324.89	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
8	1.882	131.69	16.702	263.40	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
9	1.882	250.76	16.702	371.37	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
10	1.882	102.89	16.702	214.25	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.424	10.27	16.702	3.44	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
2	1.882	107.19	16.702	254.32	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
3	1.882	204.15	16.702	347.92	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
4	1.882	130.86	16.702	229.15	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
5	1.882	221.60	16.702	349.55	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
6	1.882	102.89	16.702	214.25	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
7	1.882	192.16	16.702	324.89	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
8	1.882	131.69	16.702	263.40	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
9	1.882	250.76	16.702	371.37	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
10	1.882	102.89	16.702	214.25	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71

*** STABILITY PARAMETER

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
1	1.424	10.27	16.702	3.44	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
2	1.882	107.19	16.702	254.32	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
3	1.882	204.15	16.702	347.92	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
4	1.882	130.86	16.702	229.15	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
5	1.882	221.60	16.702	349.55	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
6	1.882	102.89	16.702	214.25	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
7	1.882	192.16	16.702	324.89	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
8	1.882	131.69	16.702	263.40	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
9	1.882	250.76	16.702	371.37	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
10	1.882	102.89	16.702	214.25	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
1	1.424	10.27	16.702	3.44	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
2	1.882	107.19	16.702	254.32	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
3	1.882	204.15	16.702	347.92	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
4	1.882	130.86	16.702	229.15	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
5	1.882	221.60	16.702	349.55	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
6	1.882	102.89	16.702	214.25	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
7	1.882	192.16	16.702	324.89	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
8	1.882	131.69	16.702	263.40	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
9	1.882	250.76	16.702	371.37	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71
10	1.882	102.89	16.702	214.25	9.447	11.56	6.492	10.89	4.715	4.91	4.499	359.71

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 27 ALPHA-MCL = 2.0 PDP RUN-PT 7.07
RUN 7 ALPHA-RAR = 2.0 Q-COMP = 32555
POINT 3 SIGMA = 135. V-REF = 200.11
COMPUTED FREQUENCY = 15.59, K = .1224
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER CPREAL	CPIMAG	.148-UPPER CPREAL	CPIMAG	.261-UPPER CPREAL	CPIMAG	.392-UPPER CPREAL	CPIMAG	.530-UPPER CPREAL	CPIMAG	.661-UPPER CPREAL	CPIMAG
1	-24	.999	-2.871	-7.667	.143	-4.550	.130	-3.264	.110	-2.989	.120	-3.078	.119	-3.008	1.139
2	1	.908	-4.460	.143	.047	.139	.040	.139	.031	.120	.028	.119	.083	.149	-.011
3	2	.561	.129	.099	.008	.004	.016	.012	.009	.028	.041	.036	.007	.056	-.021
4	3	.592	-.598	.069	.082	.033	.087	.037	.069	.048	.061	.047	.012	.042	-.030
5	4	.531	-.371	.000	.050	.026	.018	.048	.010	.061	.014	.000	.022	.017	-.021
6	5	.235	-.134	.026	.056	.039	.012	.017	.021	.009	.008	.035	.034	.002	-.026
7	6	.266	.368	.026	.016	.005	.024	.009	.010	.035	.035	.045	.020	.000	-.010
8	7	.195	.078	.023	.009	.053	.037	.047	.046	.031	.018	.032	.005	.047	-.013
9	8	.081	.201	.000	.000	.010	.017	.002	.001	.036	.003	.036	.006	.010	.004
10	9	.156	-.002	.043	.008	.025	.003	.017	.021	.036	.003	.036	.006	.021	-.011

X	N	CPREAL	CPIMAG	.060-UPPER CPREAL	CPIMAG	.090-UPPER CPREAL	CPIMAG	.012-LOWER CPREAL	CPIMAG	.062-LOWER CPREAL	CPIMAG	.148-LOWER CPREAL	CPIMAG	.261-LOWER CPREAL	CPIMAG
1	-2	.955	1.323	-1.949	.876	-1.571	.768	15.659	-1.837	8.543	1.335	4.651	1.661	3.036	1.416
2	1	.370	-.319	.191	.055	.034	.033	.760	-.134	-.274	-.568	.200	.006	.184	.104
3	2	.035	.017	.034	.018	.002	.011	-.092	.034	-.252	-.536	.073	.001	.043	-.020
4	3	.009	-.001	.007	.018	.002	.016	-.061	.034	-.263	-.036	.030	.011	.003	-.005
5	4	.006	-.000	.003	.013	.004	.012	.111	.014	-.049	-.088	.029	.012	.015	-.021
6	5	.012	-.000	.006	.001	.004	.008	.013	.082	.018	-.086	.008	.022	.040	-.020
7	6	.008	.016	.044	.006	.004	.009	-.029	.019	.063	-.030	.037	.030	.032	-.032
8	7	.001	.013	.017	.011	.015	.008	-.034	.038	.027	-.029	.017	.018	.003	-.009
10	9	.020	-.013	.017	.011	.015	.008	-.034	.038	.027	-.029	.017	.018	.003	-.009

X	N	CPREAL	CPIMAG	.530-LOWER CPREAL	CPIMAG	.661-LOWER CPREAL	CPIMAG	.774-LOWER CPREAL	CPIMAG	.860-LOWER CPREAL	CPIMAG	.910-LOWER CPREAL	CPIMAG
1	1	.697	1.061	1.324	1.105	.507	.680	.214	.782	-.424	.441	-.441	.548
2	2	.160	-.092	-.027	.388	.193	.100	.181	-.009	-.241	.139	-.069	.071
3	3	.000	.023	.022	.033	.080	.020	.074	.027	-.008	-.017	-.047	.020
4	4	.000	.009	.027	.005	.051	.062	.005	.027	.016	.031	.016	.011
5	5	.019	-.002	.027	.005	.026	.014	.035	.019	.029	.027	.010	.010
6	6	.011	.012	.015	.029	.013	.004	.022	.013	.005	.023	.016	.016
7	7	.023	.022	.014	.027	.007	.026	.050	.020	.033	.023	.037	.024
8	8	.003	-.002	.014	.027	.003	.003	.000	.013	.023	.023	.019	.011
10	9	.003	-.002	.014	.027	.003	.003	.000	.013	.023	.023	.019	.011

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 27 ALPHA-MCL = 2.0 PDP RUN-PT 7.07
RUN POINT 3 ALPHA-BAR = 12.0 Q-COMP = 32555
COMPUTED FREQUENCY = 135. V-REF = 200.11
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	062-UPPER CP-MAG	PHI	180-UPPER CP-MAG	PHI	261-UPPER CP-MAG	PHI	392-UPPER CP-MAG	PHI	530-UPPER CP-MAG	PHI	661-UPPER CP-MAG	PHI
1	25	.064	186.58	7.684	183.80	4.552	181.64	3.266	178.07	3.019	171.96	3.200	164.13	3.217	159.25
2	4	.677	287.52	.151	18.14	.144	15.89	.143	12.61	.120	1359.25	.145	125.06	.150	155.72
3	4	.567	35.55	.099	184.57	.016	74.21	.035	35.40	.034	326.95	.037	190.66	.060	200.41
4	5	.842	314.71	.108	49.85	.093	69.09	.079	61.83	.063	40.27	.048	346.04	.052	35.99
5	5	.648	34.96	.050	269.85	.031	325.39	.049	347.66	.063	346.87	.025	270.31	.026	309.13
6	7	.134	254.30	.037	225.91	.041	163.43	.027	128.50	.052	318.64	.035	277.23	.028	245.13
7	4	.454	254.20	.017	249.70	.025	258.01	.014	311.06	.050	315.05	.021	255.53	.010	268.01
8	9	.210	158.30	.024	158.86	.065	144.84	.066	135.27	.056	146.94	.045	185.94	.049	164.15
9	9	.217	67.99	.001	240.43	.020	238.84	.002	158.27	.038	27.74	.036	167.54	.011	19.85
10	9	.166	181.76	.044	350.13	.025	6.90	.027	50.70	.039	4.70	.036	352.52	.024	332.46

X	N	CP-MAG	PHI	060-UPPER CP-MAG	PHI	910-UPPER CP-MAG	PHI	012-LOWER CP-MAG	PHI	062-LOWER CP-MAG	PHI	188-LOWER CP-MAG	PHI	261-LOWER CP-MAG	PHI
1	2	.690	157.38	2.137	155.81	1.740	153.95	15.939	10.76	8.646	8.88	4.939	19.66	3.350	25.00
2	3	.175	203.46	.197	14.04	.200	208.22	1.988	292.47	.542	239.68	.200	1.59	.212	29.34
3	4	.040	23.37	.037	203.31	.038	208.22	.163	235.37	.436	305.37	.070	.91	.047	335.20
4	5	.013	299.02	.042	26.07	.039	15.25	.165	168.22	.265	172.98	.048	272.98	.006	335.20
5	5	.013	299.02	.014	282.33	.018	276.25	.138	75.34	.099	196.58	.031	159.33	.045	352.17
6	7	.018	313.21	.006	282.73	.013	281.01	.111	7.14	.066	114.57	.031	123.23	.025	321.86
7	8	.048	160.41	.046	172.50	.043	189.86	.084	260.63	.087	136.95	.023	237.71	.039	238.28
8	9	.016	92.27	.012	106.19	.007	127.54	.050	128.18	.037	136.77	.045	137.71	.048	354.90
9	9	.024	326.47	.020	327.94	.017	331.00	.020	292.69	.040	333.28	.020	290.86	.008	305.26
10	9							.051	131.30						

X	N	CP-MAG	PHI	530-LOWER CP-MAG	PHI	661-LOWER CP-MAG	PHI	774-LOWER CP-MAG	PHI	860-LOWER CP-MAG	PHI	910-LOWER CP-MAG	PHI		
1	2	.001	32.01	1.735	39.84	1.016	60.03	.811	74.67	.912	133.88	.704	128.82		
2	3	.185	20.02	.036	222.92	.217	27.39	.181	357.28	.218	330.11	.094	134.21		
3	4	.023	69.68	.040	255.92	.090	150.80	.075	187.26	.319	244.65	.024	210.39		
4	5	.015	35.71	.009	295.95	.032	145.23	.028	279.39	.035	290.78	.020	334.84		
5	6	.019	354.52	.029	19.15	.049	32.13	.033	181.84	.007	284.52	.010	279.61		
6	7	.037	226.41	.033	243.15	.017	196.42	.020	221.91	.044	257.10	.014	263.35		
7	8	.004	351.14	.045	135.50	.027	104.05	.054	157.91	.040	144.77	.043	187.82		
8	9	.009	351.14	.027	325.03	.036	345.36	.013	321.01	.007	102.81	.019	349.47		
9	9							.015							
10	9														

MODE 1 -- OCWI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 27 ALPHA-MCL = 2.0 POP RUN-PT 7.07
RUN 3 ALPHA-RAP = 2.0 Q-COMP = 32555
POINT 3 COMPTED FREQUENCY = 135. V-PEF = 200.11
FOURIER COEFFICIENTS, PEAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.148		.261		.392		.530		.661	
		DELCPR	DELCPPI	DELCPR	DELCPPI	DELCPR	DELCPPI	DELCPR	DELCPPI	DELCPR	DELCPPI	DELCPR	DELCPPI	DELCPR	DELCPPI
1	10	558	5.845	16.210	1.843	9.201	1.791	6.301	1.306	4.645	.638	4.003	.230	3.516	-.260
2	9	640	2.623	35.1	515	1.061	-.034	.045	.072	.094	.094	.093	.171	.044	-.111
3	8	553	-.483	33.2	348	.065	-.015	.031	-.029	-.002	.002	.039	.018	-.032	.041
4	7	753	-.432	33.2	348	-.031	-.134	-.043	-.074	-.048	-.019	-.024	.045	-.009	.032
5	6	486	-.238	34.4	338	-.155	.020	-.033	-.032	-.049	.023	.023	.017	-.043	.052
6	5	136	-.147	34.4	338	.085	.001	-.056	-.041	.010	.006	.010	.009	.044	.007
7	4	279	-.051	34.4	338	-.103	.007	-.041	-.012	-.046	.025	-.010	.009	-.012	.013
8	3	166	-.037	34.4	338	-.119	-.007	.011	-.014	-.031	.005	.011	.001	.007	-.001
9	2	174	-.071	34.4	338	.028	-.021	-.005	-.012	-.030	-.004	.014	.001	-.007	-.002
10	1	132	-.044	34.4	338	-.018	-.021	-.012	-.012	-.030	-.004	-.014	.001	.014	.002

X	N	.774		.800		.910		N		CNREAL		CNIMAG		N		CMREAL		CMIMAG	
		DELCPR	DELCPPI	DELCPR	DELCPPI	DELCPR	DELCPPI												
1	10	670	-.241	1.525	-.435	1.130	-.220	1	6	201	.669	.669	.282	1	2	1.447	.282	.282	.282
2	9	311	-.048	.050	-.186	-.113	-.009	2	5	034	.089	.089	.019	2	3	-.010	.019	.019	.019
3	8	339	-.034	.026	-.003	-.022	.007	3	4	006	.041	.041	.002	3	4	-.007	.002	.002	.002
4	7	318	-.013	.022	-.004	-.010	.006	4	3	008	.006	.006	.004	4	5	-.007	.004	.004	.004
5	6	336	-.006	.021	-.006	-.001	.006	5	2	026	.019	.019	.006	5	6	-.006	.006	.006	.006
6	5	334	-.001	.011	-.004	-.005	.016	6	1	016	.011	.011	.008	6	7	-.004	.008	.008	.008
7	4	303	-.001	.002	-.005	.017	.005	7	0	031	.008	.008	.002	7	8	-.001	.002	.002	.002
8	3	301	-.001	.002	-.005	.011	.005	8	0	031	.008	.008	.002	8	9	-.001	.002	.002	.002
9	2	308	-.001	.002	-.005	.011	.005	9	0	031	.008	.008	.002	9	10	-.001	.002	.002	.002
10	1	308	-.001	.002	-.005	.011	.005	10	0	031	.008	.008	.002	10	10	-.002	.002	.002	.002

*** STABILITY PARAMETER

* XI = -.2822 *

WALL NO.	N	.125		.500		.125		.500		.125		.500		.125		.500		.125	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	10	2.045	1.485	1.449	1.338	1.330	1.027	1.027	1.027	1.027	1.027	1.027	1.027	1.027	1.027	1.027	1.027	1.027	1.027
2	9	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065
3	8	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065
4	7	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065
5	6	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065
6	5	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065
7	4	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065
8	3	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065
9	2	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065
10	1	259	-.065	.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065	-.065

*** WALL PRESSURES, PER RADIAN ***

MODE 1 -- CCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 27 ALPHA-MCL = 2.0 POP RUN-PI 7.07
 POP 7 ALPHA-MAP = 13.0 G-COEF = 32559
 POINT 3 SIGMA = 135. V-COEF = 283.11
 COMPUTED FREQUENCY = 15.59, M = .1224
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661	
M	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	40.977	8.20	16.314	6.49	9.729	11.715	4.409	7.776
2	2.722	103.89	.663	210.99	.070	330.80	.102	67.13
3	.983	149.01	.494	315.29	.067	347.07	.037	122.63
4	.550	203.60	.335	187.94	.132	257.15	.052	200.75
5	.200	241.34	.085	319.74	.062	152.45	.054	154.71
6	.030	234.25	.025	92.56	.066	152.45	.012	32.81
7	.030	234.25	.025	92.56	.066	152.45	.012	32.81
8	.030	234.25	.025	92.56	.066	152.45	.012	32.81
9	.030	234.25	.025	92.56	.066	152.45	.012	32.81
10	.030	234.25	.025	92.56	.066	152.45	.012	32.81

X =	.774	.860	.910	.910	.910	.910	.910	
M	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.681	354.84	1.526	344.09	1.151	344.99	6.237	6.16
2	.049	282.23	.193	284.90	.164	171.92	.095	110.65
3	.059	232.02	.024	353.72	.016	171.92	.070	174.50
4	.040	161.93	.006	246.09	.022	171.92	.039	169.21
5	.014	216.56	.006	246.09	.007	103.17	.032	215.25
6	.021	196.97	.022	245.87	.007	103.17	.019	174.21
7	.009	155.77	.006	245.87	.013	28.02	.008	174.21
8	.009	155.77	.006	245.87	.013	28.02	.008	174.21
9	.009	155.77	.006	245.87	.013	28.02	.008	174.21
10	.009	155.77	.006	245.87	.013	28.02	.008	174.21

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
EXP	FRAC	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.527	35.98	1.973	42.72	10.240	122.31	2.683	174.33	7.802	318.97
2	.053	255.14	.117	16.12	.332	24.75	.052	16.99	1.591	191.24
3	.074	27.67	.133	57.44	.107	317.10	.052	109.20	.052	109.20
4	.074	27.67	.133	57.44	.107	317.10	.052	109.20	.052	109.20
5	.074	27.67	.133	57.44	.107	317.10	.052	109.20	.052	109.20
6	.074	27.67	.133	57.44	.107	317.10	.052	109.20	.052	109.20
7	.074	27.67	.133	57.44	.107	317.10	.052	109.20	.052	109.20
8	.074	27.67	.133	57.44	.107	317.10	.052	109.20	.052	109.20
9	.074	27.67	.133	57.44	.107	317.10	.052	109.20	.052	109.20
10	.074	27.67	.133	57.44	.107	317.10	.052	109.20	.052	109.20

*** STABILITY PARAMETER

* XI = -.2822
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ORIGINAL PAGE IS
OF POOR QUALITY.

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 29 ALPHA-MCL = 2.0 PDP RUN PT 7.10
RUN 7 ALPHA-RAR = 2.0 Q-COMP = 32547
POINT 5 SIGMA = 135. V-CREF = 200.08
COMPUTED FREQUENCY = 19.30, K = .1516

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	108-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	24	.935	-2.555	-.435	-.117	-.558	-.117	-.558
2	1	.196	-.337	.003	.038	.025	.038	.025
3	4	.560	-.698	.008	.023	.017	.023	.017
4	5	.554	-.569	.000	.044	.008	.044	.008
5	6	.014	.925	.031	.009	.021	.009	.021
6	7	.956	-.922	.024	.030	.047	.030	.047
7	8	.322	.066	.066	.047	.047	.047	.047
8	9	.007	.089	.016	.058	.065	.058	.065
9	10	.312	-.087	.067	.050	.021	.050	.021
10								

X	N	770-UPPER CPREAL CPIMAG	560-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	108-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	24	.959	1.011	-.154	.772	.012	.772	.012
2	1	.039	.008	.012	.013	.023	.013	.023
3	4	.037	.024	.024	.014	.025	.014	.025
4	5	.018	.004	.018	.023	.019	.023	.019
5	6	.053	.009	.056	.032	.009	.032	.009
6	7	.023	.004	.017	.002	.002	.002	.002
7	8	.007	.013	.000	.005	.005	.005	.005
8	9	.000	.005	.010	.005	.005	.005	.005
9	10				.010	.010	.010	.010
10								

X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	770-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG
1	24	.767	1.186	.580	.255	.440	.392
2	1	.025	.009	.031	.014	.015	.015
3	4	.008	.006	.047	.036	.006	.006
4	5	.001	.006	.059	.007	.000	.000
5	6	.003	.000	.031	.030	.003	.003
6	7	.016	.000	.010	.004	.004	.004
7	8	.011	.056	.025	.021	.049	.021
8	9	.035	.011	.015	.021	.010	.021
9	10	.012	.016	.031	.001	.002	.001
10							

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 29 ALPHA-MCL = 2.0 PDP RUN-PT 7.10
RUN 27 ALPHA-RAR = 2.0 Q-COMP = 325.7
POINT 5 ALPHA-SIGMA = 135.0 W-REF = 200.08
COMPUTED FREQUENCY = 19.30, K = .1516

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X = .012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	
1	25.065	185.85	7.751	183.22	4.560	181.48	3.256	178.40	3.014	176.70	3.190	174.84	3.153
2	7.711	227.71	.076	112.59	.046	123.51	.037	141.62	.066	190.59	.135	227.62	.073
3	.726	308.75	.075	175.33	.026	133.38	.037	204.85	.052	352.37	.073	277.23	.073
4	.895	308.75	.075	175.33	.026	133.38	.037	204.85	.052	352.37	.073	277.23	.073
5	.794	65.32	.032	160.71	.008	154.17	.012	7.43	.031	353.70	.026	259.06	.011
6	.027	65.32	.045	136.57	.086	126.53	.082	112.80	.031	56.46	.049	160.66	.081
7	.396	81.87	.083	196.94	.073	204.33	.036	198.56	.025	203.61	.050	212.16	.023
8	.323	175.33	.066	266.94	.048	259.86	.017	273.35	.026	255.79	.043	255.79	.021
9	.080	184.42	.055	197.24	.075	231.00	.052	318.60	.056	320.74	.039	306.89	.018
10	.324	195.52	.068	280.14	.059	292.32	.022	318.60	.056	320.74	.039	306.89	.018

X = .774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.148-LOWER		.261-LOWER	
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	
1	2.664	157.69	2.104	155.87	1.729	153.37	16.424	10.27	8.622	8.42	5.115	20.20	3.509
2	.008	199.71	.014	176.73	.014	174.40	.134	212.36	.357	295.18	.091	318.54	.083
3	.044	326.89	.035	324.36	.037	317.70	.169	253.10	.215	152.07	.061	259.85	.023
4	.060	151.50	.059	193.87	.065	216.03	.051	337.85	.151	264.72	.036	174.61	.021
5	.023	168.69	.015	159.69	.017	174.26	.110	85.25	.096	127.76	.081	177.23	.081
6	.055	269.97	.051	267.42	.050	269.84	.051	13.53	.041	159.86	.016	124.76	.011
7	.014	300.24	.027	9.05	.011	127.07	.071	48.67	.040	45.78	.083	136.31	.059
8	.005	85.24	.027	121.07	.011	127.07	.071	48.67	.040	45.78	.083	136.31	.059
9													
10													

X = .392-LOWER		.530-LOWER		.661-LOWER		.774-LOWER		.860-LOWER		.91J-LOWER		
N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.128	33.86	1.879	41.84	1.169	60.23	.941	74.29	.745	126.20	.791	121.01
2	.073	61.39	.066	57.55	.074	65.53	.045	251.87	.163	275.11	.205	154.62
3	.007	84.77	.025	108.90	.080	126.17	.046	241.87	.008	354.55	.021	145.13
4	.005	49.63	.014	116.48	.046	132.25	.063	154.48	.009	270.08	.019	177.06
5	.005	179.98	.013	336.53	.046	151.37	.046	194.27	.008	263.86	.012	178.16
6	.057	101.22	.082	108.10	.064	111.34	.069	223.26	.052	159.61	.030	151.65
7	.013	273.42	.080	270.54	.030	379.54	.029	288.15	.033	263.61	.023	263.61
8	.041	153.55	.034	196.97	.031	188.09	.039	202.60	.028	247.11	.024	247.11
9												
10												

ORIGINAL PAGE IS
OF POOR QUALITY

OCW PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 29 ALPHA-PCL = 2.0 PDP RUN.PI 7.16
RUN 7 ALPHA-PAP = 2.0 Q-COMP = .32547
POINT 5 SIGMA = 135. V-PEF = 200.98
COMPUTED FREQUENCY = 10.30, K = .1516

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	1.103	5.465	16.344	1.709	9.359	1.884	6.396
2	-.643	2.609	-.402	-.350	-.059	-.060	-.060
3	-.756	-.408	-.227	-.376	-.070	-.070	-.070
4	-.711	-.775	-.267	-.093	-.063	-.063	-.063
5	-.506	-.588	-.018	-.150	-.037	-.037	-.037
6	-.016	-.016	-.026	-.046	-.084	-.084	-.084
7	-.036	-.332	-.121	-.024	-.084	-.084	-.084
8	-.372	-.014	-.015	-.024	-.084	-.084	-.084
9	-.039	-.025	-.041	-.045	-.131	-.094	-.094
10	-.290	-.179	-.043	-.134	-.066	-.094	-.068

X =	.774	.860	.910	.910	.910	.910	.910
N	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	2.719	-.106	1.480	1.259	1.154	1.174	1.174
2	-.025	-.033	-.033	-.014	-.014	-.014	-.014
3	-.044	-.037	-.028	-.024	-.024	-.024	-.024
4	-.009	-.012	-.012	-.022	-.022	-.022	-.022
5	-.018	-.047	-.034	-.013	-.013	-.013	-.013
6	-.021	-.036	-.012	-.023	-.023	-.023	-.023
7	-.006	-.053	-.017	-.028	-.028	-.028	-.028
8	-.036	-.029	-.003	-.003	-.003	-.003	-.003
9	-.036	-.029	-.003	-.003	-.003	-.003	-.003
10	-.036	-.029	-.003	-.003	-.003	-.003	-.003

*** STABILITY PARAMETER

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
GAP FRACTION	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	2.087	1.565	1.506	1.421	1.421	1.421	1.421	1.421	1.421	1.421
2	-.005	-.011	-.011	-.011	-.011	-.011	-.011	-.011	-.011	-.011
3	-.019	-.019	-.019	-.019	-.019	-.019	-.019	-.019	-.019	-.019
4	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.005
5	-.043	-.043	-.043	-.043	-.043	-.043	-.043	-.043	-.043	-.043
6	-.011	-.011	-.011	-.011	-.011	-.011	-.011	-.011	-.011	-.011
7	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010
8	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010
9	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010	-.010
10	-.002	-.002	-.002	-.002	-.002	-.002	-.002	-.002	-.002	-.002

*** WALL PRESSURES, PER RADIAN ***

* XI = -.2678 *

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 29 ALPHA-MCL = 2.0 POP RUN-PT 7.10
RUN 7 ALPHA-BAR = 2.0 Q-COMP = 125.47
POINT 5 SIGMA = 135 V-REF = 200.08
COMPUTED FREQUENCY = 19.30, K = .1516
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
		.012	.062	.148	.261	.392	.530	.661					
1	1	4.45	7.57	16.43	22.00	9.59	12.79	4.62	9.58	4.48	9.58	4.48	9.58
2	2	6.82	10.17	23.00	30.48	11.38	15.36	6.24	12.79	4.48	9.58	4.48	9.58
3	3	8.59	12.79	29.83	38.04	15.36	21.08	8.24	15.36	4.48	9.58	4.48	9.58
4	4	10.36	15.36	36.66	45.66	19.30	28.04	10.36	19.30	4.48	9.58	4.48	9.58
5	5	12.13	17.93	43.49	53.26	22.00	32.66	12.13	22.00	4.48	9.58	4.48	9.58
6	6	13.90	20.50	50.32	60.89	25.00	37.29	13.90	25.00	4.48	9.58	4.48	9.58
7	7	15.67	23.07	57.15	68.47	28.04	41.91	15.67	28.04	4.48	9.58	4.48	9.58
8	8	17.44	25.64	63.98	76.05	31.08	46.54	17.44	31.08	4.48	9.58	4.48	9.58
9	9	19.21	28.21	70.81	83.63	34.12	51.17	19.21	34.12	4.48	9.58	4.48	9.58
10	10	20.98	30.78	77.64	91.21	37.16	55.80	20.98	37.16	4.48	9.58	4.48	9.58

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
		.774	.860	.910									
1	1	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
2	2	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
3	3	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
4	4	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
5	5	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
6	6	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
7	7	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
8	8	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
9	9	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78
10	10	2.71	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78	1.16	357.78

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
			.125	.125	.125	.125	.125	.125	.125	.125	.125	.125	.125	.125
1	1	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
2	2	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
3	3	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
4	4	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
5	5	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
6	6	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
7	7	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
8	8	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
9	9	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911
10	10	2.609	36.85	2.070	43.34	10.116	181.50	2.628	174.24	7.911	319.29	7.911	319.29	7.911

*** STABILITY PARAMETER

W	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
1	1	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
2	2	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
3	3	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
4	4	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
5	5	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
6	6	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
7	7	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
8	8	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
9	9	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491
10	10	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491	1.491

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 39 ALPHA-MCL = 2.0 POP RUM-PT 9.10
HUM 9 ALPHA-RAR = 2.0 O-COMP = 32110
POINT 1 SIGMA = 180. V-REF = 198.68
COMPUTED FREQUENCY = 9.16, N = 8724

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	912-UPPER CPREAL CPIMAG	992-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	-25	520	1.572	745	745	458	3.090	3.110
2	-338	1.425	0.013	155	155	0.58	0.86	0.068
3	790	1.171	0.134	171	171	0.117	0.137	0.079
4	-267	0.022	0.044	0.022	0.022	0.007	0.022	0.006
5	538	0.035	0.015	0.035	0.035	0.001	0.035	0.016
6	-1005	0.012	0.085	0.012	0.012	0.021	0.030	0.010
7	449	0.051	0.030	0.051	0.051	0.004	0.022	0.003
8	-866	0.058	0.020	0.058	0.058	0.021	0.024	0.004
9	180	0.251	0.019	0.251	0.251	0.002	0.004	0.006
10	167	0.173	0.028	0.173	0.173	0.007	0.024	0.021
			0.004	0.007	0.004	0.033	0.005	0.000

X	N	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	912-UPPER CPREAL CPIMAG	992-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	-2	514	0.454	476	476	0.69	5.637	3.843
2	-526	0.005	0.001	0.005	0.005	0.12	0.67	0.000
3	101	0.006	0.001	0.006	0.006	0.183	0.190	0.159
4	-007	0.006	0.005	0.006	0.006	0.137	0.059	0.039
5	019	0.003	0.008	0.003	0.003	0.047	0.026	0.006
6	-001	0.035	0.037	0.035	0.035	0.153	0.045	0.057
7	003	0.004	0.001	0.004	0.004	0.024	0.031	0.025
8	-006	0.004	0.004	0.004	0.004	0.026	0.034	0.010
9	003	0.011	0.014	0.011	0.011	0.026	0.018	0.032
10	031	0.004	0.000	0.004	0.004	0.049	0.027	0.035

X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG
1	2	218	1.957	890	667	208	0.08
2	-055	0.693	0.027	0.025	0.42	0.18	0.18
3	009	0.093	0.010	0.019	0.077	0.146	0.107
4	-004	0.020	0.021	0.031	0.039	0.040	0.050
5	010	0.007	0.019	0.018	0.045	0.009	0.022
6	-006	0.007	0.010	0.015	0.026	0.031	0.018
7	004	0.020	0.010	0.015	0.020	0.007	0.008
8	-004	0.004	0.004	0.004	0.004	0.007	0.004
9	031	0.004	0.004	0.004	0.004	0.007	0.010
10						0.031	0.025

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 39 ALPHA-MCL = 2.0 PDP RUN.PT 9.10
RUN 9 ALPHA-BAR = 2.0 Q-COMP = 32110
POINT 1 SIGMA = 180. V-REF = 198.68
COMPUTED FREQUENCY = 9.16, K = .0724

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	062-UPPER	CP-MAG	PHI	148-UPPER	CP-MAG	PHI	261-UPPER	CP-MAG	PHI	392-UPPER	CP-MAG	PHI	530-UPPER	CP-MAG	PHI	661-UPPER	CP-MAG	PHI
1	25	.568	176.48	7.652	174.41	4.390	172.83	3.103	171.51	2.929	170.61	3.120	172.11	3.143	171.70	3.120	172.11	3.143	171.70	3.143	171.70
2	4	.808	265.64	.156	85.20	.092	102.49	.066	118.11	.044	188.05	.146	234.16	.179	223.70	.146	234.16	.179	223.70	.179	223.70
3	4	.816	250.87	.041	61.35	.217	77.98	.204	135.08	.215	170.93	.049	215.98	.021	173.93	.049	215.98	.021	173.93	.021	173.93
4	5	.567	341.78	.086	134.94	.039	116.22	.030	102.45	.025	286.34	.039	215.98	.011	197.09	.039	215.98	.011	197.09	.011	197.09
5	6	.518	104.41	.082	179.11	.086	81.01	.074	177.29	.044	89.49	.043	153.33	.032	103.70	.043	153.33	.032	103.70	.032	103.70
6	7	.550	324.66	.058	295.88	.034	242.81	.033	276.35	.070	287.51	.033	273.67	.032	264.70	.033	273.67	.032	264.70	.032	264.70
7	8	.260	104.72	.058	174.50	.027	133.05	.025	175.35	.021	180.49	.024	183.95	.006	184.65	.024	183.95	.006	184.65	.006	184.65
8	9	.224	323.52	.009	174.06	.037	130.82	.037	113.83	.033	189.19	.021	159.42	.021	151.07	.021	159.42	.021	151.07	.021	151.07
9	10	.241	46.05	.017	324.22	.009	329.01	.037	114.16	.033	177.33	.021	347.03	.021	347.03	.021	347.03	.021	347.03	.021	347.03

X	N	CP-MAG	PHI	062-UPPER	CP-MAG	PHI	148-UPPER	CP-MAG	PHI	261-UPPER	CP-MAG	PHI	392-UPPER	CP-MAG	PHI	530-UPPER	CP-MAG	PHI	661-UPPER	CP-MAG	PHI
1	2	.555	169.77	1.955	158.07	1.461	158.92	17.798	359.76	9.955	358.57	5.676	244.07	3.916	213.04	5.676	244.07	3.916	213.04	3.916	213.04
2	3	.046	173.78	.045	53.25	.182	53.96	2.745	144.12	1.061	358.57	1.152	244.07	.100	213.04	1.152	244.07	.100	213.04	.100	213.04
3	4	.173	54.22	.174	90.96	.011	90.96	.312	144.12	.548	358.57	.207	219.61	.039	181.02	.207	219.61	.039	181.02	.039	181.02
4	5	.019	170.10	.016	175.76	.021	157.76	.101	187.75	.161	168.45	.055	174.00	.023	177.26	.055	174.00	.023	177.26	.023	177.26
5	6	.037	188.78	.034	185.76	.036	197.96	.145	217.12	.181	197.83	.045	174.00	.027	180.90	.045	174.00	.027	180.90	.027	180.90
6	7	.038	274.68	.040	266.10	.037	261.91	.114	327.50	.144	235.84	.039	143.86	.034	161.01	.039	143.86	.034	161.01	.034	161.01
7	8	.008	212.11	.009	111.59	.004	11.91	.104	327.50	.029	190.22	.023	143.86	.011	144.51	.023	143.86	.011	144.51	.011	144.51
8	9	.011	75.17	.010	101.28	.017	124.22	.088	159.18	.047	159.89	.027	143.86	.037	143.86	.027	143.86	.037	143.86	.037	143.86
9	10	.031	352.98	.031	348.06	.027	124.22	.068	159.18	.056	159.89	.027	143.86	.037	143.86	.027	143.86	.037	143.86	.037	143.86

X	N	CP-MAG	PHI	062-UPPER	CP-MAG	PHI	148-UPPER	CP-MAG	PHI	261-UPPER	CP-MAG	PHI	392-UPPER	CP-MAG	PHI	530-UPPER	CP-MAG	PHI	661-UPPER	CP-MAG	PHI
1	2	.381	16.91	2.146	22.64	1.275	39.96	1.053	50.68	.220	18.91	.730	89.39	.442	198.79	.730	89.39	.442	198.79	.442	198.79
2	3	.037	194.79	.037	44.93	.180	62.62	.084	240.32	.199	43.07	.442	198.79	.147	46.66	.442	198.79	.147	46.66	.147	46.66
3	4	.143	40.38	.175	118.82	.058	55.31	.173	200.37	.199	43.07	.442	198.79	.147	46.66	.442	198.79	.147	46.66	.147	46.66
4	5	.025	136.07	.038	123.84	.071	118.82	.062	130.86	.042	155.46	.050	155.46	.035	167.74	.050	155.46	.035	167.74	.035	167.74
5	6	.036	146.01	.043	116.67	.058	118.82	.062	130.86	.042	155.46	.050	155.46	.035	167.74	.050	155.46	.035	167.74	.035	167.74
6	7	.009	325.97	.024	246.64	.042	235.07	.025	232.98	.034	259.80	.012	259.80	.012	259.80	.012	259.80	.012	259.80	.012	259.80
7	8	.006	141.36	.013	22.42	.042	1.24	.015	116.89	.034	259.80	.012	259.80	.012	259.80	.012	259.80	.012	259.80	.012	259.80
8	9	.031	141.36	.031	141.36	.042	1.24	.031	146.93	.034	259.80	.012	259.80	.012	259.80	.012	259.80	.012	259.80	.012	259.80
9	10	.031	111.94	.031	141.36	.042	1.24	.031	146.93	.034	259.80	.012	259.80	.012	259.80	.012	259.80	.012	259.80	.012	259.80

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39 ALPHA=CL = 2.0 PDP KUN.PT = 9.10
9 ALPHA=PAR = 2.0 Q-COMP = 32110
1 SIGMA = 180. V-REF = 198.68
COMPUTED FREQUENCY = 9.16, K = .0724

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FOURIER COEFFICIENTS, REAL & IMAGINARY
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
 COMPUTED FREQUENCY = 9.16, K =

X	77°		°60		°90		N	CNREAL	CNIMAG	N	CNREAL	CNIMAG
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP						
1	3.181	2.135	1.371	1.405	1.371	205	1	5.853	100	1	1.535	-.059
2	3.004	2.102	1.368	1.373	1.368	205	2	5.024	100	2	1.513	-.059
3	2.824	2.042	1.364	1.303	1.364	205	3	4.204	100	3	1.491	-.059
4	2.644	1.982	1.361	1.241	1.361	205	4	3.385	100	4	1.469	-.059
5	2.464	1.922	1.358	1.181	1.358	205	5	2.566	100	5	1.447	-.059
6	2.284	1.862	1.355	1.121	1.355	205	6	1.747	100	6	1.425	-.059
7	2.104	1.802	1.352	1.061	1.352	205	7	9.287	100	7	1.403	-.059
8	1.924	1.742	1.349	1.001	1.349	205	8	8.468	100	8	1.381	-.059
9	1.744	1.682	1.346	0.941	1.346	205	9	7.649	100	9	1.359	-.059
10	1.564	1.622	1.343	0.881	1.343	205	10	6.830	100	10	1.337	-.059

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

[illegible]

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 39 ALPHA-MCL = 2.0 PDP RUN-PT 9.10
RUN 9 ALPHA-RAR = 2.0 G-COMP = 32110
POINT 1 SIGMA = 180. V-REF = 198.68
COMPUTED FREQUENCY = 9.16, K = .0724

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
		012		062		148		261		392		530	
1	43	348	357.83	17	596	356.76	9	994	258.35	64	6	918	263.84
2	1	715	92.15	1	193	235.23	2	231	286.25	64	6	918	263.84
3	1	043	179.15	1	193	235.23	2	231	286.25	64	6	918	263.84
4	1	043	179.15	1	193	235.23	2	231	286.25	64	6	918	263.84
5	1	043	179.15	1	193	235.23	2	231	286.25	64	6	918	263.84
6	1	043	179.15	1	193	235.23	2	231	286.25	64	6	918	263.84
7	1	043	179.15	1	193	235.23	2	231	286.25	64	6	918	263.84
8	1	043	179.15	1	193	235.23	2	231	286.25	64	6	918	263.84
9	1	043	179.15	1	193	235.23	2	231	286.25	64	6	918	263.84
10	1	043	179.15	1	193	235.23	2	231	286.25	64	6	918	263.84

X	N	DELCPM	774	PHI	DELCPM	860	PHI	DELCPM	910	PHI	N	CM-MAG	PHIN	N	CM-MAG	PHIN
1	3	2078	273.79	47	2	143	349.11	1	186	8.49	1	516	357.83	1	516	357.83
2	1	078	273.79	19	2	287	323.59	1	335	208.30	2	037	224.82	2	037	224.82
3	1	078	273.79	19	2	057	255.96	1	335	208.30	3	040	224.82	3	040	224.82
4	1	062	273.79	50	2	004	225.96	1	011	174.36	4	048	224.82	4	048	224.82
5	1	062	273.79	55	2	034	229.49	1	011	174.36	5	033	224.82	5	033	224.82
6	1	062	273.79	55	2	014	236.57	1	008	136.13	6	023	224.82	6	023	224.82
7	1	062	273.79	55	2	014	236.57	1	008	136.13	7	006	224.82	7	006	224.82
8	1	062	273.79	55	2	018	236.57	1	006	136.13	8	006	224.82	8	006	224.82
9	1	062	273.79	55	2	018	236.57	1	006	136.13	9	006	224.82	9	006	224.82
10	1	062	273.79	55	2	018	236.57	1	006	136.13	10	006	224.82	10	006	224.82

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	N	W1	W2	W3	W4	W5	W6	W10	W125	W500	W1025	W1500	W1750
GAP	FRAC	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	3	174	108	209	108	209	108	209	108	209	108	209	108
2	1	108	209	108	209	108	209	108	209	108	209	108	209
3	1	108	209	108	209	108	209	108	209	108	209	108	209
4	1	108	209	108	209	108	209	108	209	108	209	108	209
5	1	108	209	108	209	108	209	108	209	108	209	108	209
6	1	108	209	108	209	108	209	108	209	108	209	108	209
7	1	108	209	108	209	108	209	108	209	108	209	108	209
8	1	108	209	108	209	108	209	108	209	108	209	108	209
9	1	108	209	108	209	108	209	108	209	108	209	108	209
10	1	108	209	108	209	108	209	108	209	108	209	108	209

*** STABILITY PARAMETE

WALL NO.	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI		
		W1		W125		W500		W1025		W1500		W1750			
1	3	174	14.34	2	593	18.67	9	870	173.80	2	457	164.91	7	650	148.91
2	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91
3	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91
4	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91
5	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91
6	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91
7	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91
8	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91
9	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91
10	1	108	187.08	1	648	95.96	2	114	265.18	1	104	148.91	1	594	148.91

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 41 ALPHA-WCL = 2.0 PDP 9.20
RUN 9 ALPHA-PAR = 2.0 C-IMP = 32430
POINT 3 SIGMA = 180. C-IMP = 199.68
COMPUTED FREQUENCY = 15.47, K = .1217

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	25	.095	.084	.057	.071	.117	.351	.324
2	25	.031	.011	.037	.081	.087	.019	.023
3	25	.095	.034	.037	.081	.087	.019	.023
4	25	.032	.011	.037	.081	.087	.019	.023
5	25	.095	.034	.037	.081	.087	.019	.023
6	25	.032	.011	.037	.081	.087	.019	.023
7	25	.095	.034	.037	.081	.087	.019	.023
8	25	.032	.011	.037	.081	.087	.019	.023
9	25	.095	.034	.037	.081	.087	.019	.023
10	25	.032	.011	.037	.081	.087	.019	.023

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	25	.095	.084	.057	.071	.117	.351	.324
2	25	.031	.011	.037	.081	.087	.019	.023
3	25	.095	.034	.037	.081	.087	.019	.023
4	25	.032	.011	.037	.081	.087	.019	.023
5	25	.095	.034	.037	.081	.087	.019	.023
6	25	.032	.011	.037	.081	.087	.019	.023
7	25	.095	.034	.037	.081	.087	.019	.023
8	25	.032	.011	.037	.081	.087	.019	.023
9	25	.095	.034	.037	.081	.087	.019	.023
10	25	.032	.011	.037	.081	.087	.019	.023

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	25	.095	.084	.057	.071	.117	.351
2	25	.031	.011	.037	.081	.087	.019
3	25	.095	.034	.037	.081	.087	.019
4	25	.032	.011	.037	.081	.087	.019
5	25	.095	.034	.037	.081	.087	.019
6	25	.032	.011	.037	.081	.087	.019
7	25	.095	.034	.037	.081	.087	.019
8	25	.032	.011	.037	.081	.087	.019
9	25	.095	.034	.037	.081	.087	.019
10	25	.032	.011	.037	.081	.087	.019

ORIGINAL PAGE IS
OF POOR QUALITY

OCMI PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE #1 ALPHA-MCL = 2.0 PDP RUN-PT 9.20
RUN 9 ALPHA-PA = 2.0 O-COMP = 32430
POINT 3 ALPHA-SIGMA = 180.0 V-REF = 199.68
COMPUTED FREQUENCY = 15.47, N = .1217

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	PHI	062-UPPER	CP-MAG	PHI	148-UPPER	CP-MAG	PHI	261-UPPER	CP-MAG	PHI	392-UPPER	CP-MAG	PHI	530-UPPER	CP-MAG	PHI	661-UPPER	CP-MAG	PHI
1	25.779	175.36	7.765	177.10	4.547	179.90	3.258	183.10	3.078	183.80	3.132	185.56	3.132	185.56	3.375	186.97	3.355	186.97	3.355	186.97
2	4.589	262.10	.011	25.79	.077	358.91	.078	359.80	.083	359.80	.090	359.80	.090	359.80	.072	359.80	.072	359.80	.072	359.80
3	.792	350.68	.016	27.58	.045	386.46	.035	385.90	.035	385.90	.041	386.58	.041	386.58	.036	386.58	.036	386.58	.036	386.58
4	.664	335.45	.023	29.14	.024	349.60	.039	345.13	.044	345.13	.044	345.13	.044	345.13	.034	345.13	.034	345.13	.034	345.13
5	.158	216.06	.024	269.32	.024	349.60	.039	345.13	.044	345.13	.044	345.13	.044	345.13	.034	345.13	.034	345.13	.034	345.13
6	.494	304.45	.015	166.30	.022	347.44	.011	340.33	.011	340.33	.022	340.33	.022	340.33	.025	340.33	.025	340.33	.025	340.33
7	.137	53.74	.031	149.03	.008	172.52	.024	359.81	.024	359.81	.026	359.81	.026	359.81	.011	359.81	.011	359.81	.011	359.81
8	.182	294.78	.011	83.73	.008	172.52	.024	359.81	.024	359.81	.026	359.81	.026	359.81	.012	359.81	.012	359.81	.012	359.81
9	.322	333.29																		
10																				

N	CP-MAG	PHI	062-UPPER	CP-MAG	PHI	012-UPPER	CP-MAG	PHI	012-UPPER	CP-MAG	PHI	062-UPPER	CP-MAG	PHI	148-UPPER	CP-MAG	PHI	261-UPPER	CP-MAG	PHI
1	2.755	187.36	2.117	189.68	1.555	189.84	17.377	358.77	17.377	358.77	9.402	352.30	9.402	352.30	5.437	352.30	5.437	352.30	5.437	352.30
2	.022	165.24	.023	179.53	.007	309.95	.134	188.23	.134	188.23	.266	268.32	.266	268.32	.083	268.32	.083	268.32	.083	268.32
3	.011	264.08	.012	274.82	.032	265.21	.083	261.46	.083	261.46	.124	273.06	.124	273.06	.020	273.06	.020	273.06	.020	273.06
4	.013	36.75	.015	76.51	.012	253.07	.051	261.46	.051	261.46	.078	208.91	.078	208.91	.018	208.91	.018	208.91	.018	208.91
5	.012	139.57	.019	142.05	.014	332.12	.032	334.96	.032	334.96	.078	191.24	.078	191.24	.013	191.24	.013	191.24	.013	191.24
6	.010		.005		.008	116.52	.023	210.28	.023	210.28	.003	253.36	.003	253.36	.015	253.36	.015	253.36	.015	253.36
7																				
8																				
9																				
10																				

N	CP-MAG	PHI	062-UPPER	CP-MAG	PHI	061-UPPER	CP-MAG	PHI	061-UPPER	CP-MAG	PHI	060-UPPER	CP-MAG	PHI	091-UPPER	CP-MAG	PHI	091-UPPER	CP-MAG	PHI
1	2.112	306.86	1.752	305.95	.864	18.76	.519	20.67	.519	20.67	.460	339.15	.460	339.15	.143	339.15	.143	339.15	.143	339.15
2	.032	176.58	.031	185.33	.141	15.44	.034	187.00	.034	187.00	.204	273.11	.204	273.11	.182	273.11	.182	273.11	.182	273.11
3	.017	239.48	.014	232.09	.027	15.70	.034	192.92	.034	192.92	.077	191.05	.077	191.05	.038	191.05	.038	191.05	.038	191.05
4	.008	251.40	.010	242.94	.035	361.20	.029	180.58	.029	180.58	.023	223.17	.023	223.17	.019	223.17	.019	223.17	.019	223.17
5	.041	107.40	.047	107.40	.006	275.11	.002	225.72	.002	225.72	.042	148.21	.042	148.21	.007	148.21	.007	148.21	.007	148.21
6	.019	265.40	.017	284.02	.029	240.20	.017	117.47	.017	117.47	.015	260.59	.015	260.59	.014	260.59	.014	260.59	.014	260.59
7																				
8																				
9																				
10																				

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41 ALPHA-MCL = 2.0      PDP RUN.PT = 9.2G
9  ALPHA-RAR = 2.0      O-COMP = .3243D
3  SIGMA = 180.         V-REF = 199.68
      COMPUTED FREQUENCY = 15.47, K = .1217

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 15.47, K =

X	.012		.562		.148		.261		.392		.530		.661	
	N	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	3.025	3.396	17.073	-1.653	9.984	0.11	6.889	336	5.219	503	5.084	661	4.151	652
2	1.160	1.924	0.009	5.68	0.055	0.37	0.13	0.68	0.028	0.01	0.09	0.091	0.061	0.066
3	1.061	1.900	0.04	4.15	0.028	0.17	0.68	0.18	0.071	0.04	0.038	0.000	0.016	0.026
4	1.061	1.900	0.04	4.15	0.028	0.17	0.68	0.18	0.071	0.04	0.038	0.000	0.016	0.026
5	1.061	1.900	0.04	4.15	0.028	0.17	0.68	0.18	0.071	0.04	0.038	0.000	0.016	0.026
6	1.061	1.900	0.04	4.15	0.028	0.17	0.68	0.18	0.071	0.04	0.038	0.000	0.016	0.026
7	1.061	1.900	0.04	4.15	0.028	0.17	0.68	0.18	0.071	0.04	0.038	0.000	0.016	0.026
8	1.061	1.900	0.04	4.15	0.028	0.17	0.68	0.18	0.071	0.04	0.038	0.000	0.016	0.026
9	1.061	1.900	0.04	4.15	0.028	0.17	0.68	0.18	0.071	0.04	0.038	0.000	0.016	0.026
10	1.061	1.900	0.04	4.15	0.028	0.17	0.68	0.18	0.071	0.04	0.038	0.000	0.016	0.026

X	.77 ^a		.86D		.91D	
	DELCPR	DELCPI	DELCPR	DELCPI	DELCPR	DELCPI
1	3.217	.598	1.846	.081	1.447	.315
2	-.027	-.017	-.002	-.080	-.225	.065
3	-.028	-.011	-.002	-.025	-.033	.013
4	-.036	-.045	-.007	-.015	-.002	.021
5	-.007	-.035	-.020	-.005	.006	.023
6	-.012	-.009	-.020	-.026	-.004	.011
7	-.007	-.007	-.009	-.019	-.004	.026
8	-.007	-.007	-.001	-.001	.001	.016
9	-.002	-.007	-.001	-.001	.003	.029
10						.011

*** STABILITY PARAMETER

*** WALL PRESSURE, PER RADIAN ***

[illegible]

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 41 ALPHA-MCL = 2.0 POP RUN-PT 9.20
RUN 9 ALPHA-RAR = 2.0 O-COMP = 32430
POINT 3 SIGMA = 180. V-REF = 195.68
COMPUTED FREQUENCY = 15.47, A = .1217
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	43.156	355.53	17.133	354.47	9.984	219.48	6.897	259.31	5.244	131.50	5.51	5.126
2	1.931	85.24	217.63	217.63	219.48	219.48	6.897	259.31	5.244	131.50	5.51	5.126
3	1.970	169.83	415.24	268.77	0.46	232.32	0.69	195.58	0.77	158.39	0.90	0.114
4	591	170.89	253	143.67	140	226.93	0.80	212.54	0.24	188.58	0.41	0.038
5	121	151.93	112	236.39	0.45	113.04	0.27	104.46	0.45	101.57	0.31	0.009
6	513	119.47	108	277.42	0.32	226.80	0.55	193.01	0.42	141.57	0.25	0.052
7	134	121.03	028	230.34	0.12	238.50	0.25	135.48	0.50	86.01	0.01	0.041
8	185	159.02	066	306.71	0.41	316.00	0.12	127.90	0.13	79.96	0.00	0.010
9	345	213.11	017	260.55	0.092	227.52	0.30	221.63	0.022	14.33	0.00	0.032
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X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.263	9.68	1.846	358.72	1.452	12.54	6.832	1.23	6.832	1.23	1.521	355.28
2	0.77	249.14	0.86	284.71	0.19	135.03	0.66	196.99	0.66	196.99	0.013	166.47
3	0.32	180.22	0.25	265.23	0.02	196.44	0.30	142.93	0.30	142.93	0.022	211.50
4	0.65	200.67	0.09	196.05	0.02	196.44	0.16	127.81	0.16	127.81	0.014	117.73
5	0.41	82.36	0.09	121.87	0.02	115.80	0.19	114.78	0.19	114.78	0.002	117.68
6	0.15	218.22	0.31	231.17	0.26	281.32	0.19	114.78	0.19	114.78	0.010	114.86
7	0.48	92.12	0.21	168.35	0.29	281.32	0.23	174.03	0.23	174.03	0.001	269.05
8	0.07	75.98	0.02	214.84	0.13	281.32	0.06	227.35	0.06	227.35	0.002	49.89
9	0.08	252.78	0.019	233.94	0.012	284.86	0.032	227.35	0.032	227.35	0.007	210.17
10												

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
GAP FRACTION	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.849	359.38	0.75	260.68	0.39	222.15	0.25	268.77	0.34	268.77	0.06	149.89
2	0.75	260.68	0.39	222.15	0.25	268.77	0.06	149.89	0.06	149.89	0.019	47.41
3	0.39	222.15	0.25	268.77	0.06	149.89	0.019	47.41	0.019	47.41	0.019	47.41
4	0.25	268.77	0.06	149.89	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41
5	0.06	149.89	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41
6	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41
7	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41
8	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41
9	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41
10	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41	0.019	47.41

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
CENTFR BLADE DATA, WALL STATIONS

MODE 1 --

FILE #3 ALPHA-MCL = 2.0 PCP RUN-PT 9.22
RUN 9 ALPHA-PAD = 2.0 Q-COMP = 32527
POINT 5 SIGMA = 1PD. V-REF = 199.96
COMPUTED FREQUENCY = 19.03, K = .1498
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.149-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG			
1	25	.440	2.4500	.542	.095	.240	.146	.111	.296	.327	.390
2	4	.363	.01	.019	.155	.033	.119	.032	.057	.113	.026
3	4	.120	.018	.040	.037	.025	.025	.015	.047	.009	.034
4	4	.215	.025	.008	.033	.024	.014	.015	.007	.004	.011
5	4	.612	.025	.003	.009	.024	.016	.035	.022	.004	.007
6	4	.009	.025	.003	.009	.024	.016	.035	.022	.004	.007
7	4	.205	.025	.003	.009	.024	.016	.035	.022	.004	.007
8	4	.199	.025	.003	.009	.024	.016	.035	.022	.004	.007
9	4	.163	.025	.003	.009	.024	.016	.035	.022	.004	.007
10	4	.203	.025	.003	.009	.024	.016	.035	.022	.004	.007

X	N	.778-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.149-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG			
1	2	.640	.375	.524	.256	.677	.370	.592	.333	.133	.298
2	4	.035	.018	.002	.018	.077	.044	.044	.035	.032	.035
3	4	.011	.018	.002	.018	.077	.044	.044	.035	.032	.035
4	4	.001	.018	.002	.018	.077	.044	.044	.035	.032	.035
5	4	.001	.018	.002	.018	.077	.044	.044	.035	.032	.035
6	4	.001	.018	.002	.018	.077	.044	.044	.035	.032	.035
7	4	.001	.018	.002	.018	.077	.044	.044	.035	.032	.035
8	4	.001	.018	.002	.018	.077	.044	.044	.035	.032	.035
9	4	.001	.018	.002	.018	.077	.044	.044	.035	.032	.035
10	4	.001	.018	.002	.018	.077	.044	.044	.035	.032	.035

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.778-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	2	.098 -.033	1.682 -.024	.788 -.006	.440 -.069	.347 -.042	.120 -.014
2	4	.036 -.005	.012 -.004	.008 -.006	.052 -.036	.007 -.007	.010 -.004
3	4	.000 -.006	.018 -.019	.008 -.028	.035 -.015	.030 -.003	.009 -.019
4	4	.000 -.006	.018 -.019	.008 -.028	.035 -.015	.030 -.003	.009 -.019
5	4	.000 -.006	.018 -.019	.008 -.028	.035 -.015	.030 -.003	.009 -.019
6	7	.000 -.006	.018 -.019	.008 -.028	.035 -.015	.030 -.003	.009 -.019
7	6	.000 -.006	.018 -.019	.008 -.028	.035 -.015	.030 -.003	.009 -.019
8	9	.000 -.006	.018 -.019	.008 -.028	.035 -.015	.030 -.003	.009 -.019
9	9	.000 -.006	.018 -.019	.008 -.028	.035 -.015	.030 -.003	.009 -.019
10	10	.000 -.006	.018 -.019	.008 -.028	.035 -.015	.030 -.003	.009 -.019

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 43 ALPHA-MCL = 2.0 PDB RUN-PI 9.222
RUN 9 ALPHA-BAR = 2.0 C-COMP = 12527
POINT 5 SIGMA = 1.0 V-DEF = 199.92
COMPUTED FREQUENCY = 19.08, K = .1498
AMPLITUDE AND PHASE ANGLE

FOURIER COEFFICIENTS, PER RADIAN ***
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	.563	174.39	7.709	175.97	4.522	178.79	3.243	182.58	3.125	185.83	3.373	187.27
2	33	.436	259.60	.202	85.92	.156	96.92	.123	105.31	.068	122.80	.115	190.10
3	41	.524	348.39	.031	144.79	.059	345.83	.055	333.23	.057	304.64	.011	210.83
4	49	.816	246.50	.325	127.00	.054	42.66	.035	23.15	.017	338.20	.049	187.27
5	57	.694	340.63	.047	116.05	.044	338.03	.020	325.57	.016	308.58	.020	177.27
6	65	.294	271.80	.047	267.68	.044	11.47	.058	344.76	.152	308.58	.022	252.55
7	73	.228	334.50	.072	162.24	.051	168.13	.036	207.23	.073	183.38	.026	210.89
8	81	.201	251.95	.073	137.56	.051	128.95	.023	316.12	.073	229.54	.024	214.29
9	89	.206	10.16	.073	187.12	.063	172.45	.048	198.62	.080	205.54	.066	211.75
10				.033	312.28	.037	329.77	.058	329.51	.065	308.65	.043	344.47

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	.667	188.08	2.088	189.97	1.543	189.52	17.055	355.32	9.133	351.94	5.372	191.83
2	33	.021	122.43	.022	114.25	.019	96.51	.328	155.11	.328	156.89	.072	333.65
3	41	.022	87.70	.024	233.79	.031	236.02	.149	91.10	.189	211.09	.087	212.26
4	49	.022	296.81	.012	149.99	.023	152.02	.059	317.50	.128	211.09	.037	110.33
5	57	.022	233.14	.025	149.99	.023	142.85	.122	140.19	.101	308.58	.066	309.27
6	65	.022	229.70	.025	233.22	.020	226.72	.095	211.57	.023	323.05	.015	186.22
7	73	.039	229.70	.041	43.22	.029	43.03	.063	155.35	.019	341.97	.034	331.08
8	81							.013	155.35	.012	47.86	.039	125.08

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	.073	8.96	1.732	13.79	.096	28.76	.541	35.59	.389	206.65	.160	138.53
2	33	.081	357.02	.070	118.80	.067	84.76	.070	173.91	.093	243.04	.244	144.95
3	41	.006	218.24	.022	303.20	.066	316.58	.050	223.08	.015	115.77	.030	162.82
4	49	.006	274.13	.016	122.59	.027	52.76	.040	81.43	.056	212.35	.011	292.91
5	57	.027	296.28	.144	305.08	.087	289.36	.036	292.75	.007	182.99	.034	28.61
6	65	.023	196.53	.056	142.08	.017	86.71	.036	106.35	.021	154.66	.023	303.12
7	73	.023	117.52	.022	142.88	.014	206.52	.024	150.36	.040	209.60	.017	217.97
8	81	.004	183.65	.011	197.41	.023	142.02	.008	332.53	.018	289.20	.042	210.07
9										.018	289.20	.025	309.09

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MODE 1 -- OCWT PERIODICITY TEST
CENTR BLADE DATA, WALL STATIONS

FILE 43 ALPHA-MCL = 2.0 POP RUN-PT 9.22
RUN 9 ALPHA-PAR = 2.0 O-COMP = 32527
POINT 5 SIGMA = 180. V-REF = 199.98
COMPUTED FREQUENCY = 19.08, K = .1498

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.148		.261		.392		.510		.661	
		DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP
1	2	.030	-3.092	16.731	-1.022	9.891	-.073	6.832	-.011	5.159	.618	5.028	.840	.080	.817
2	3	.131	2.055	-.692	-.356	-.071	-.175	-.014	-.040	-.004	.017	.079	.081	.065	.091
3	4	.079	-.097	-.051	-.158	-.007	-.017	-.014	-.011	-.026	.006	.006	.013	.023	.041
4	5	.022	.075	-.105	-.088	-.114	-.083	-.075	-.020	-.004	.004	.060	.006	.045	.048
5	6	.045	.155	-.099	-.136	-.021	-.088	-.015	-.049	-.075	.009	.082	.006	.020	.018
6	7	.023	.174	.031	-.032	-.081	-.060	-.040	-.071	.082	.029	.004	.067	.050	.062
7	8	.027	.186	.082	-.021	-.027	-.008	-.039	.010	-.078	.009	.001	.032	.032	.037
8	9	.127	-.186	-.096	-.021	-.169	-.034	-.075	.045	-.045	.050	.004	.007	.038	.031
9	10	.215	-.031	-.014	.033	-.054	-.050	-.048	.045	-.045	.050	.004	.007	.051	.007

X	N	.774		.860		.910	
		DELCPR	DELCP	DELCPR	DELCP	DELCPR	DELCP
1	2	.080	-.065	1.710	-.165	1.403	.362
2	3	.038	-.035	-.002	-.006	-.016	.008
3	4	.028	-.021	-.010	-.017	.014	.016
4	5	.005	-.020	-.015	-.023	.017	.003
5	6	.004	-.020	.031	.013	-.024	.019
6	7	.002	.027	.006	.011	.001	.005
7	8	.018	.014	.011	.016	.008	.008
8	9	.027	-.023	-.025	-.046	-.005	-.040
9	10						

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	.125		.250		.375		.500		.625		.750		.875		.1000	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	2	2.787	-.086	2.198	.063	1.403	.063	1.403	.063	1.403	.063	1.403	.063	1.403	.063	1.403	.063
2	3	-.021	.036	-.025	.039	-.025	.039	-.025	.039	-.025	.039	-.025	.039	-.025	.039	-.025	.039
3	4	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009
4	5	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009
5	6	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009
6	7	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009
7	8	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009
8	9	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009
9	10	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009	-.002	.009

*** STABILITY PARAMETER

* XI = .1460 *

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MODE 1 -- OCUT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 43 ALPHA-MCL = 2.0 PDP RUN-PT 9.22
RUM 5 ALPHA-RAR = 2.0 O-COMP = 32527
POINT 9 SIGMA = 180. V-REF = 199.98
COMPUTED FREQUENCY = 19.08, K = .1498

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.617	354.76	16.830	353.79	9.891	247.26	6.847	3.72	5.196	6.84	5.098	9.48
2	2.059	86.35	.776	206.81	.189	291.46	.042	254.54	.017	77.25	.114	45.57
3	.916	163.28	.340	261.32	.019	216.24	.018	218.30	.021	119.86	.015	66.53
4	.954	170.24	.132	221.73	.044	119.19	.078	194.57	.021	169.07	.061	349.30
5	.595	162.87	.139	221.92	.060	268.78	.063	233.64	.097	133.58	.143	305.11
6	.758	97.24	.097	334.95	.087	222.48	.090	251.78	.087	119.71	.098	183.61
7	.175	97.69	.021	259.10	.028	196.68	.040	165.26	.083	120.13	.013	100.37
8	.314	232.22	.096	2.95	.115	342.60	.075	165.93	.094	120.43	.065	100.00
9	.225	55.72	.036	113.26	.074	137.15	.066	136.81	.067	131.97	.051	172.08
10	.217	188.15										

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	3.157	12.62	1.727	6.25	1.449	14.45	6.730	1.92	1.506	358.44	1.506	358.44
2	.074	76.35	.065	266.82	.158	155.50	.026	152.85	.022	139.83	.022	139.83
3	.036	216.97	.032	193.77	.018	28.08	.023	182.27	.019	207.33	.019	207.33
4	.018	73.78	.019	239.92	.014	36.95	.024	114.64	.017	109.78	.017	109.78
5	.021	286.57	.027	302.55	.056	4.62	.016	162.32	.014	174.54	.014	174.54
6	.027	96.78	.033	156.41	.030	310.78	.047	292.40	.013	113.95	.013	113.95
7	.027	96.78	.012	62.13	.005	179.22	.019	188.51	.007	227.69	.007	227.69
8	.022	38.41	.019	125.68	.040	136.23	.056	17.21	.011	124.85	.011	124.85
9	.035	221.22	.052	241.15			.045	166.17	.009	124.00	.009	124.00
10												

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.189	1.76	2.199	1.63	9.940	175.66	2.578	182.49	7.949	359.34
2	.222	137.74	.800	94.82	2.429	259.20	.233	115.22	1.602	260.16
3	.047	131.23	.178	140.89	.429	346.76	.131	338.80	.208	376.75
4	.009	104.83	.042	109.00	.206	286.46	.042	374.70	.010	233.37
5	.012	104.83	.022	104.33	.061	347.99	.047	370.74	.010	376.69
6	.017	116.40	.019	104.33	.032	168.03	.027	270.55	.010	158.72
7	.026	184.60	.050	193.93	.035	163.93	.027	268.66	.004	159.94
8	.021	197.62	.008	350.48	.064	225.48	.045	200.99	.043	158.59
9	.009	201.01	.002	350.11	.051	353.95	.030	331.65	.031	348.74
10										

TABLE 6

MODE 1 DATA FOR $\alpha_{MCL} = 6 \text{ deg}$, $\bar{\alpha} = 0.5 \text{ deg}$

<u>σ (deg)</u>	<u>k</u>	<u>page</u>
-135	.0716	214
"	.1215	218
"	.1497	222
-90	.0714	226
"	.1226	230
"	.1516	234
-45	.0705	238
"	.1196	242
"	.1482	246
0	.0716	250
"	.1230	254
"	.1500	258
45	.0718	262
"	.1224	266
"	.1507	270
90	.0714	274
"	.1222	278
"	.1510	282
135	.0726	286
"	.1224	290
"	.1510	294
180	.0709	298
"	.1208	302
"	.1493	306

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MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, HALL STATIONS

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FILE 126 ALPHA-MCL = 6.0
RUN 126 ALPHA-BAR = .5
POINT 1 COMPUTED FREQUENCY = 9.12, K = .0716
      Q-COMP = 33.594
      W-REF = 200.22
      POP RUN, PT 36.02

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES: PER RADIAN ***
COMPUTED

N	X	.012-UPPER CPREAL	.062-UPPER CPREAL	.148-UPPER CPREAL	.261-UPPER CPREAL	.392-UPPER CPREAL	.530-UPPER CPREAL	.661-UPPER CPREAL
1	19	1.575	1.710	1.839	1.951	2.056	2.156	2.252
2	17	1.772	1.778	1.691	1.522	1.274	1.016	.758
3	14	1.994	1.775	1.499	1.275	1.033	.783	.525
4	10	2.208	1.749	1.366	1.072	.783	.515	.257
5	7	2.385	1.699	1.158	.870	.603	.356	.108
6	4	2.535	1.649	1.099	.822	.569	.319	.070
7	2	2.657	1.602	1.059	.800	.559	.313	.073
8	0	2.754	1.570	1.034	.791	.552	.310	.073
9	0	2.821	1.550	1.019	.782	.548	.307	.073
10	0	2.869	1.539	1.011	.777	.545	.305	.073

[illegible][illegible]

OCWI PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 126 ALPHA-MCL = 6.0 PDP RUN-PI 26.02
RUN 26 ALPHA-BAR = 0.5 C-COMP = 32.597
POINT 1 SIGMA = -135.0 V-REF = 230.22
COMPUTED FREQUENCY = 9.12, K = .0716
FOUPIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	19	1.6718	167.36	1.5719	166.96	1.3158	167.91	1.217	177.74	1.777	174.52
2	1	1.613	312.65	1.469	306.93	1.454	306.28	1.583	157.15	1.583	157.42
3	1	1.198	146.96	1.146	284.42	1.159	296.72	1.593	305.52	1.593	305.52
4	5	1.152	310.93	1.107	271.04	1.199	229.34	1.233	227.56	1.233	227.56
5	6	1.193	250.13	1.235	125.92	1.208	126.63	1.235	126.05	1.235	126.05
6	7	1.054	137.13	1.122	179.92	1.128	186.98	1.128	186.98	1.128	186.98
7	8	1.056	237.56	1.072	210.74	1.079	214.98	1.079	214.98	1.079	214.98
8	9	1.025	77.73	1.075	118.30	1.075	119.72	1.075	119.72	1.075	119.72
9	10										
10											

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	1.130	183.87	1.731	178.04	1.548	175.52	1.983	193.33	1.983	193.33
2	2	1.621	308.73	1.573	309.97	1.596	308.04	1.511	301.84	1.511	301.84
3	3	1.183	302.82	1.175	299.16	1.179	306.12	1.261	292.27	1.261	292.27
4	4	1.235	276.28	1.220	225.14	1.204	231.78	1.196	212.08	1.196	212.08
5	5	1.269	198.55	1.295	271.86	1.266	275.96	1.251	265.44	1.251	265.44
6	6	1.160	168.55	1.183	204.81	1.166	202.31	1.138	197.69	1.138	197.69
7	7	1.044	144.86	1.044	163.81	1.044	155.27	1.084	139.87	1.084	139.87
8	8			1.028	137.58	1.037	125.64	1.055	123.02	1.055	123.02
9	9										
10	10										

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	1.743	297.87	1.617	82.16	1.556	137.31	1.538	143.86	1.538	143.86
2	2	1.545	297.96	1.620	258.23	1.551	307.90	1.554	311.49	1.554	311.49
3	3	1.184	298.05	1.211	298.87	1.171	301.64	1.183	300.63	1.183	300.63
4	4	1.162	277.68	1.194	229.56	1.174	229.77	1.189	229.76	1.189	229.76
5	5	1.207	277.12	1.261	272.77	1.222	272.77	1.290	276.04	1.290	276.04
6	6	1.140	195.68	1.175	119.81	1.152	119.81	1.174	123.73	1.174	123.73
7	7	1.157	154.32	1.069	161.02	1.069	160.75	1.069	169.12	1.069	169.12
8	8	1.044	116.63	1.046	117.47	1.046	129.36	1.043	137.60	1.043	137.60
9	9										
10	10										

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OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 126 ALPHA-MCA = 6.0 POP RUN PI 26.592
POINT 1 ALPHA-RA = 135.0 O-COMP = 200.22
COMPUTED SIGMA = 135.0 V-REF = 200.22
FREQUENCY = 9.12, K = .0716

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCP8 ⁰¹²	DELCP8 ⁰⁶²	DELCP8 ¹⁴⁸	DELCP8 ²⁶¹	DELCP8 ³⁹²	DELCP8 ⁵³⁰	DELCP8 ⁶⁶²
1	27.983	-3.260	11.432	-1.738	8.212	-1.161	5.642
2	1.274	-0.010	0.020	-0.071	0.007	-0.036	0.007
3	0.265	-0.010	0.055	-0.037	0.007	-0.013	0.007
4	0.037	-0.039	0.013	-0.011	0.007	-0.007	0.007
5	0.010	-0.029	0.007	-0.007	0.007	-0.007	0.007
6	0.001	-0.007	0.007	-0.007	0.007	-0.007	0.007
7	0.001	-0.007	0.007	-0.007	0.007	-0.007	0.007
8	0.001	-0.007	0.007	-0.007	0.007	-0.007	0.007
9	0.001	-0.007	0.007	-0.007	0.007	-0.007	0.007
10	0.001	-0.007	0.007	-0.007	0.007	-0.007	0.007

N	DELCP8 ⁷⁷⁴	DELCP8 ⁸⁶⁰	DELCP8 ⁹¹⁰	DELCP8 ⁹¹⁰	DELCP8 ⁹¹⁰	DELCP8 ⁹¹⁰	DELCP8 ⁹¹⁰
1	1.899	0.989	1.028	0.028	0.028	0.028	0.028
2	0.016	0.016	0.016	0.016	0.016	0.016	0.016
3	0.015	0.015	0.015	0.015	0.015	0.015	0.015
4	0.015	0.015	0.015	0.015	0.015	0.015	0.015
5	0.015	0.015	0.015	0.015	0.015	0.015	0.015
6	0.015	0.015	0.015	0.015	0.015	0.015	0.015
7	0.015	0.015	0.015	0.015	0.015	0.015	0.015
8	0.015	0.015	0.015	0.015	0.015	0.015	0.015
9	0.015	0.015	0.015	0.015	0.015	0.015	0.015
10	0.015	0.015	0.015	0.015	0.015	0.015	0.015

*** STABILITY PARAMETER ***

WALL NO.	W1	W2	W3	W4	W5	W6	W10
GAP FRACTION	0.125	0.000	0.125	0.125	0.500	0.500	1.125
1	0.879	0.279	0.279	0.279	0.279	0.279	0.279
2	0.268	0.267	0.267	0.267	0.267	0.267	0.267
3	0.013	0.013	0.013	0.013	0.013	0.013	0.013
4	0.013	0.013	0.013	0.013	0.013	0.013	0.013
5	0.013	0.013	0.013	0.013	0.013	0.013	0.013
6	0.013	0.013	0.013	0.013	0.013	0.013	0.013
7	0.013	0.013	0.013	0.013	0.013	0.013	0.013
8	0.013	0.013	0.013	0.013	0.013	0.013	0.013
9	0.013	0.013	0.013	0.013	0.013	0.013	0.013
10	0.013	0.013	0.013	0.013	0.013	0.013	0.013

*** WALL PRESSURES, PER RADIAN ***

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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FILE = 126
RUN = 26
POINT = 1
ALPHACL = 6.0
ALPHAPAR = .5
SIGMA = 135.
COMPUTED FREQUENCY = 9.12, K = .0716
POP RUN.PI = 36569
O-COMP = 3250.22
V-PERF = 320.22

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPH	PWI	DELCPH	PWI	DELCPH	PWI	DELCPH	PWI	DELCPH	PWI	DELCPH	PWI	DELCPH	PWI	DELCPH	PWI
		012		026		148		265		392		530		661			
22	2	9.614	347.98	11.563	351.36	324.50	665	132	354.80	4	397.93	3.940	8.24	3.495	10.07		
23	1	139	345.99	---	279.84	346.82	008	008	354.69	0	147.40	0.750	0.31	0.115	13.11		
24	3	138	175.21	0.85	285.75	289.28	023	228.64	001	110.40	773.40	0.018	0.94	0.043	13.11		
25	4	265	177.93	0.86	306.75	257.19	021	230.27	002	715.67	209.44	0.162	1.86	0.028	30.84		
26	5	154	314.44	0.17	187.39	182.32	007	264.56	041	1139.35	263.11	0.022	97.50	0.012	2695.20		
27	6	155	68.99	0.03	13.39	59.67	012	274.57	011	2377.65	245.22	0.036	20.77	0.020	2069.69		
28	8	171	158.14	0.54	225.92	230.67	029	177.01	011	1333.70	185.27	0.050	20.77	0.023	2378.83		
29	9	270	222.49	0.25	284.31	305.39	031	324.31	019	133.70	26.79	0.019	26.79	0.008	328.32		
30	0	069	222.49	0.25	284.31	305.39	031	324.31	019	133.70	26.79	0.019	26.79	0.008	328.32		

X =	-77°		-86°		-91°		N	CN-MAG	PHIN
	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI			
1	2.131	27.40	1.089	19.39	1.547	22.83	1	5.107	357.99
2	.050	16.86	.043	33.34	.029	205.25	2	.006	345.57
3	.034	178.86	.054	30.02	.034	283.25	3	.017	357.51
4	.039	178.78	.054	58.77	.017	298.70	4	.008	1297.51
5	.012	145.44	.044	61.18	.020	171.34	5	.019	176.51
6	.023	271.40	.052	52.37	.011	269.02	6	.030	259.34
7	.023	126.93	.026	342.79	.020	350.56	7	.019	153.81
8	.033	200.93	.006	99.69	.013	191.51	8	.030	253.56
9	.005	236.30	.027	43.99	.010	199.99	9	.011	320.21
0							10		

*** STABILITY PARAMETER

*** MAIN BODY ***

[illegible]

*** STABILITY PARAMETER

*** MAIN BODY ***

[illegible]

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

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128 ALPHA-UCI = 6.7      POP RUN.PI = 35.04
26  ALPHA-AS = .5        C-COMP = 33.525
3   SIGMA = 135.         V-PEF = 200.00
      COMPUTED FREQUENCY = 15.47, K = .1215
      REAL & IMAGINARY

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	°12-UPPER		°62-UPPER		°148-UPPER		°261-UPPER		°530-UPPER		°661-UPPER	
	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	-1.9431	5.4733	-7.8239	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
2	-1.9435	5.4685	-7.824	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
3	-1.9439	5.4637	-7.8241	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
4	-1.9443	5.4589	-7.8242	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
5	-1.9447	5.4541	-7.8243	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
6	-1.9451	5.4493	-7.8244	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
7	-1.9455	5.4445	-7.8245	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
8	-1.9459	5.4397	-7.8246	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
9	-1.9463	5.4349	-7.8247	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
10	-1.9467	5.4301	-7.8248	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
11	-1.9471	5.4253	-7.8249	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
12	-1.9475	5.4205	-7.825	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
13	-1.9479	5.4157	-7.8251	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
14	-1.9483	5.4109	-7.8252	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
15	-1.9487	5.4061	-7.8253	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
16	-1.9491	5.4013	-7.8254	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
17	-1.9495	5.3965	-7.8255	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
18	-1.9499	5.3917	-7.8256	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
19	-1.9503	5.3869	-7.8257	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
20	-1.9507	5.3821	-7.8258	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
21	-1.9511	5.3773	-7.8259	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
22	-1.9515	5.3725	-7.826	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
23	-1.9519	5.3677	-7.8261	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
24	-1.9523	5.3629	-7.8262	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
25	-1.9527	5.3581	-7.8263	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
26	-1.9531	5.3533	-7.8264	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
27	-1.9535	5.3485	-7.8265	3.024	-5.574	1.054	-4.3495	5.107	-4.147	-1.3173	-1.493	
28	-1.9539	5.3437	-7.8266	3.024	-5.574							

X =	774-UPPER CPREAL CPIMAG	660-UPPER CPREAL CPIMAG	513-UPPER CPREAL CPIMAG	412-LOWER CPREAL CPIMAG	362-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	1.377	1.949	1.684	3.147	4.313	1.981
2	1.431	2.019	1.837	9.107	4.117	1.257
3	1.186	1.667	1.655	1.114	4.146	1.157
4	1.428	1.958	1.533	1.110	2.156	1.527
5	1.322	1.827	1.477	1.449	1.132	1.089
6	1.366	1.927	1.344	1.056	1.147	1.049
7	1.621	2.356	1.053	0.524	1.074	1.014
8	1.433	1.933	1.134	0.694	1.055	1.037
9	1.672	2.433	1.048	0.322	0.883	0.877
10	1.523	2.073	1.034	0.19	0.735	0.815

X	Y	Z	REAL	LOW	CP	REAL	LOW	CP	REAL	LOW	CP	REAL	LOW	CP	REAL	LOW	CP
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
28	28	28	28														

MODE 1 --- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 128 ALPHA-PERL = 6.0 POP RUN.PI 36559
R01 26 ALPHA-PERL = 6.0 C-COMP = 200.00
POINT 3 SIGMA = -135. V-REF = 200.00
COMPUTED FREQUENCY = 15.47, K = .1215

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	27	5.54	165.44	7.87	174.15	5.57	179.47	4.369	186.62	4.217	193.36	4.351	197.61
2	27	5.245	150.42	1.457	44.04	1.552	45.01	1.659	45.87	1.747	45.97	1.801	46.40
3	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
4	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
5	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
6	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
7	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
8	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
9	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
10	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	27	5.54	165.44	7.87	174.15	5.57	179.47	4.369	186.62	4.217	193.36	4.351	197.61
2	27	5.245	150.42	1.457	44.04	1.552	45.01	1.659	45.87	1.747	45.97	1.801	46.40
3	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
4	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
5	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
6	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
7	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
8	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
9	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
10	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	27	5.54	165.44	7.87	174.15	5.57	179.47	4.369	186.62	4.217	193.36	4.351	197.61
2	27	5.245	150.42	1.457	44.04	1.552	45.01	1.659	45.87	1.747	45.97	1.801	46.40
3	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
4	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
5	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
6	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
7	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
8	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
9	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40
10	27	5.11	279.59	1.52	44.04	1.52	45.01	1.659	45.87	1.747	45.97	1.801	46.40

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

CODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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FILE 128 ALPHA-XCL = 6.0 POP RUN.PI 36.523
RUN 26 ALPHA-PAB = 5.5 C-COMP = 20.023
POINT 3 SIGMA = 135 V-DEF = 20.023
COMPUTED FREQUENCY = 15.47, K = .1215
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 15.474 A =

[illegible]

X =	N	DELCP	DELCP1	DELCP2	DELCP3	DELCP4	DELCP5	DELCP6	DELCP7	DELCP8	DELCP9	DELCP10	DELCP11	DELCP12	DELCP13	DELCP14	DELCP15	DELCP16	DELCP17	DELCP18	DELCP19	DELCP20	DELCP21	DELCP22	DELCP23	DELCP24	DELCP25	DELCP26	DELCP27	DELCP28	DELCP29	DELCP30	DELCP31	DELCP32	DELCP33	DELCP34	DELCP35	DELCP36	DELCP37	DELCP38	DELCP39	DELCP40	DELCP41	DELCP42	DELCP43	DELCP44	DELCP45	DELCP46	DELCP47	DELCP48	DELCP49	DELCP50	DELCP51	DELCP52	DELCP53	DELCP54	DELCP55	DELCP56	DELCP57	DELCP58	DELCP59	DELCP60	DELCP61	DELCP62	DELCP63	DELCP64	DELCP65	DELCP66	DELCP67	DELCP68	DELCP69	DELCP70	DELCP71	DELCP72	DELCP73	DELCP74	DELCP75	DELCP76	DELCP77	DELCP78	DELCP79	DELCP80	DELCP81	DELCP82	DELCP83	DELCP84	DELCP85	DELCP86	DELCP87	DELCP88	DELCP89	DELCP90	DELCP91	DELCP92	DELCP93	DELCP94	DELCP95	DELCP96	DELCP97	DELCP98	DELCP99	DELCP100	DELCP101	DELCP102	DELCP103	DELCP104	DELCP105	DELCP106	DELCP107	DELCP108	DELCP109	DELCP110	DELCP111	DELCP112	DELCP113	DELCP114	DELCP115	DELCP116	DELCP117	DELCP118	DELCP119	DELCP120	DELCP121	DELCP122	DELCP123	DELCP124	DELCP125	DELCP126	DELCP127	DELCP128	DELCP129	DELCP130	DELCP131	DELCP132	DELCP133	DELCP134	DELCP135	DELCP136	DELCP137	DELCP138	DELCP139	DELCP140	DELCP141	DELCP142	DELCP143	DELCP144	DELCP145	DELCP146	DELCP147	DELCP148	DELCP149	DELCP150	DELCP151	DELCP152	DELCP153	DELCP154	DELCP155	DELCP156	DELCP157	DELCP158	DELCP159	DELCP160	DELCP161	DELCP162	DELCP163	DELCP164	DELCP165	DELCP166	DELCP167	DELCP168	DELCP169	DELCP170	DELCP171	DELCP172	DELCP173	DELCP174	DELCP175	DELCP176	DELCP177	DELCP178	DELCP179	DELCP180	DELCP181	DELCP182	DELCP183	DELCP184	DELCP185	DELCP186	DELCP187	DELCP188	DELCP189	DELCP190	DELCP191	DELCP192	DELCP193	DELCP194	DELCP195	DELCP196	DELCP197	DELCP198	DELCP199	DELCP200	DELCP201	DELCP202	DELCP203	DELCP204	DELCP205	DELCP206	DELCP207	DELCP208	DELCP209	DELCP210	DELCP211	DELCP212	DELCP213	DELCP214	DELCP215	DELCP216	DELCP217	DELCP218	DELCP219	DELCP220	DELCP221	DELCP222	DELCP223	DELCP224	DELCP225	DELCP226	DELCP227	DELCP228	DELCP229	DELCP230	DELCP231	DELCP232	DELCP233	DELCP234	DELCP235	DELCP236	DELCP237	DELCP238	DELCP239	DELCP240	DELCP241	DELCP242	DELCP243	DELCP244	DELCP245	DELCP246	DELCP247	DELCP248	DELCP249	DELCP250	DELCP251	DELCP252	DELCP253	DELCP254	DELCP255	DELCP256	DELCP257	DELCP258	DELCP259	DELCP260	DELCP261	DELCP262	DELCP263	DELCP264	DELCP265	DELCP266	DELCP267	DELCP268	DELCP269	DELCP270	DELCP271	DELCP272	DELCP273	DELCP274	DELCP275	DELCP276	DELCP277	DELCP278	DELCP279	DELCP280	DELCP281	DELCP282	DELCP283	DELCP284	DELCP285	DELCP286	DELCP287	DELCP288	DELCP289	DELCP290	DELCP291	DELCP292	DELCP293	DELCP294	DELCP295	DELCP296	DELCP297	DELCP298	DELCP299	DELCP300	DELCP301	DELCP302	DELCP303	DELCP304	DELCP305	DELCP306	DELCP307	DELCP308	DELCP309	DELCP310	DELCP311	DELCP312	DELCP313	DELCP314	DELCP315	DELCP316	DELCP317	DELCP318	DELCP319	DELCP320	DELCP321	DELCP322	DELCP323	DELCP324	DELCP325	DELCP326	DELCP327	DELCP328	DELCP329	DELCP330	DELCP331	DELCP332	DELCP333	DELCP334	DELCP335	DELCP336	DELCP337	DELCP338	DELCP339	DELCP340	DELCP341	DELCP342	DELCP343	DELCP344	DELCP345	DELCP346	DELCP347	DELCP348	DELCP349	DELCP350	DELCP351	DELCP352	DELCP353	DELCP354	DELCP355	DELCP356	DELCP357	DELCP358	DELCP359	DELCP360	DELCP361	DELCP362	DELCP363	DELCP364	DELCP365	DELCP366	DELCP367	DELCP368	DELCP369	DELCP370	DELCP371	DELCP372	DELCP373	DELCP374	DELCP375	DELCP376	DELCP377	DELCP378	DELCP379	
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*** STABILITY PARAMETER

*** WALL PRESSURE, PER RADIAN ***

WALL NO. GAP FRACTION	W1 -125 CPIMAG	W2 -70 CPREAL	W4 -175 CPREAL	W6 -500 CPREAL	W10 -1125 CPREAL	W12 -1750 CPREAL	W15 -2250 CPREAL	W20 -3000 CPREAL	W25 -3750 CPREAL	W30 -4500 CPREAL	W40 -6000 CPREAL	W50 -7500 CPREAL	W60 -9000 CPREAL	W75 -11250 CPREAL	W100 -15000 CPREAL	W125 -18750 CPREAL	W150 -22500 CPREAL	W200 -30000 CPREAL	W250 -37500 CPREAL	W300 -45000 CPREAL	W400 -60000 CPREAL	W500 -75000 CPREAL	W600 -90000 CPREAL	W750 -112500 CPREAL	W1000 -150000 CPREAL	W1250 -187500 CPREAL	W1500 -225000 CPREAL	W2000 -300000 CPREAL	W2500 -375000 CPREAL	W3000 -450000 CPREAL	W4000 -600000 CPREAL	W5000 -750000 CPREAL	W6000 -900000 CPREAL	W7500 -1125000 CPREAL	W10000 -1500000 CPREAL	W12500 -1875000 CPREAL	W15000 -2250000 CPREAL	W20000 -3000000 CPREAL	W25000 -3750000 CPREAL	W30000 -4500000 CPREAL	W40000 -6000000 CPREAL	W50000 -7500000 CPREAL	W60000 -9000000 CPREAL	W75000 -11250000 CPREAL	W100000 -15000000 CPREAL	W125000 -18750000 CPREAL	W150000 -22500000 CPREAL	W200000 -30000000 CPREAL	W250000 -37500000 CPREAL	W300000 -45000000 CPREAL	W400000 -60000000 CPREAL	W500000 -75000000 CPREAL	W600000 -90000000 CPREAL	W750000 -112500000 CPREAL	W1000000 -150000000 CPREAL	W1250000 -187500000 CPREAL	W1500000 -225000000 CPREAL	W2000000 -300000000 CPREAL	W2500000 -375000000 CPREAL	W3000000 -450000000 CPREAL	W4000000 -600000000 CPREAL	W5000000 -750000000 CPREAL	W6000000 -900000000 CPREAL	W7500000 -1125000000 CPREAL	W10000000 -1500000000 CPREAL	W12500000 -1875000000 CPREAL	W15000000 -2250000000 CPREAL	W20000000 -3000000000 CPREAL	W25000000 -3750000000 CPREAL	W30000000 -4500000000 CPREAL	W40000000 -6000000000 CPREAL	W50000000 -7500000000 CPREAL	W60000000 -9000000000 CPREAL	W75000000 -11250000000 CPREAL	W100000000 -15000000000 CPREAL	W125000000 -18750000000 CPREAL	W150000000 -22500000000 CPREAL	W200000000 -30000000000 CPREAL	W250000000 -37500000000 CPREAL	W300000000 -45000000000 CPREAL	W400000000 -60000000000 CPREAL	W500000000 -75000000000 CPREAL	W600000000 -90000000000 CPREAL	W750000000 -112500000000 CPREAL	W1000000000 -150000000000 CPREAL	W1250000000 -187500000000 CPREAL	W1500000000 -225000000000 CPREAL	W2000000000 -300000000000 CPREAL	W2500000000 -375000000000 CPREAL	W3000000000 -450000000000 CPREAL	W4000000000 -600000000000 CPREAL	W5000000000 -750000000000 CPREAL	W6000000000 -900000000000 CPREAL	W7500000000 -1125000000000 CPREAL	W10000000000 -1500000000000 CPREAL	W12500000000 -1875000000000 CPREAL	W15000000000 -2250000000000 CPREAL	W20000000000 -3000000000000 CPREAL	W25000000000 -3750000000000 CPREAL	W30000000000 -4500000000000 CPREAL	W40000000000 -6000000000000 CPREAL	W50000000000 -7500000000000 CPREAL	W60000000000 -9000000000000 CPREAL	W75000000000 -11250000000000 CPREAL	W100000000000 -15000000000000 CPREAL	W125000000000 -18750000000000 CPREAL	W150000000000 -22500000000000 CPREAL	W200000000000 -30000000000000 CPREAL	W250000000000 -37500000000000 CPREAL	W300000000000 -45000000000000 CPREAL	W400000000000 -60000000000000 CPREAL	W500000000000 -75000000000000 CPREAL	W600000000000 -90000000000000 CPREAL	W750000000000 -112500000000000 CPREAL	W1000000000000 -150000000000000 CPREAL	W1250000000000 -187500000000000 CPREAL	W1500000000000 -225000000000000 CPREAL	W2000000000000 -300000000000000 CPREAL	W2500000000000 -375000000000000 CPREAL	W3000000000000 -450000000000000 CPREAL	W4000000000000 -600000000000000 CPREAL	W5000000000000 -750000000000000 CPREAL	W6000000000000 -900000000000000 CPREAL	W7500000000000 -1125000000000000 CPREAL	W10000000000000 -1500000000000000 CPREAL	W12500000000000 -1875000000000000 CPREAL	W15000000000000 -2250000000000000 CPREAL	W20000000000000 -3000000000000000 CPREAL	W25000000000000 -3750000000000000 CPREAL	W30000000000000 -4500000000000000 CPREAL	W40000000000000 -6000000000000000 CPREAL	W50000000000000 -7500000000000000 CPREAL	W60000000000000 -9000000000000000 CPREAL	W75000000000000 -11250000000000000 CPREAL	W100000000000000 -15000000000000000 CPREAL	W125000000000000 -18750000000000000 CPREAL	
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MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 178 ALPHA-HCL = 6.0 POP RUNPT 36524
 POINT 23 ALPHA-HA = 135 C-COMP = 32525
 SIGMA = 135 V-REF = 200.00
 COMPUTED FREQUENCY = 15.47 K = .1215

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	33.152	243.88	12.293	351.19	8.162	359.37	5.988	355.94	4.167	351.19	4.766	351.19
2	46.7	116.84	0.47	153.14	0.41	272.76	0.31	159.11	0.25	162.09	0.17	162.09
3	131	195.55	0.52	172.56	0.50	140.04	0.25	164.14	0.16	162.09	0.17	162.09
4	305	63.45	0.29	26.27	0.31	83.79	0.27	147.74	0.23	157.50	0.18	157.50
5	114	304.03	0.29	98.21	0.35	106.48	0.17	107.93	0.37	77.52	0.45	77.52
6	173	138.23	0.40	157.67	0.42	167.18	0.38	150.98	0.35	194.79	0.15	194.79
7	178	336.38	0.14	289.89	0.39	37.94	0.16	61.44	0.35	317.00	0.15	317.00
8	369	315.88	0.71	314.39	0.39	348.24	0.23	331.10	0.13	317.00	0.15	317.00
9	067	53.19	0.36	18.39	0.30	39.47	0.16	331.10	0.13	317.00	0.15	317.00
10												

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.278	34.16	1.292	250.45	1.698	24.28	1.698	24.28	1.698	24.28	1.698	24.28
2	332	26.98	0.18	151.28	0.18	151.28	0.18	151.28	0.18	151.28	0.18	151.28
3	030	215.77	0.12	184.14	0.11	337.18	0.11	337.18	0.11	337.18	0.11	337.18
4	043	109.71	0.02	244.15	0.16	59.75	0.16	59.75	0.16	59.75	0.16	59.75
5	022	236.74	0.31	222.16	0.14	186.43	0.14	186.43	0.14	186.43	0.14	186.43
6	013	244.10	0.31	97.07	0.17	189.17	0.17	189.17	0.17	189.17	0.17	189.17
7	016	354.63	0.12	65.73	0.15	128.34	0.15	128.34	0.15	128.34	0.15	128.34
8												
9												
10												

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.220	284.77	1.369	243.45	1.369	243.45	1.369	243.45	1.369	243.45	1.369	243.45
2	369	242.00	0.16	152.51	0.16	152.51	0.16	152.51	0.16	152.51	0.16	152.51
3	090	242.51	0.02	218.51	0.02	218.51	0.02	218.51	0.02	218.51	0.02	218.51
4	052	218.51	0.12	225.51	0.12	225.51	0.12	225.51	0.12	225.51	0.12	225.51
5	128	325.51	0.12	325.51	0.12	325.51	0.12	325.51	0.12	325.51	0.12	325.51
6	141	151.71	0.07	151.71	0.07	151.71	0.07	151.71	0.07	151.71	0.07	151.71
7												
8												
9												
10												

*** STABILITY PARAMETER

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.220	284.77	1.369	243.45	1.369	243.45	1.369	243.45	1.369	243.45	1.369	243.45
2	369	242.00	0.16	152.51	0.16	152.51	0.16	152.51	0.16	152.51	0.16	152.51
3	090	242.51	0.02	218.51	0.02	218.51	0.02	218.51	0.02	218.51	0.02	218.51
4	052	218.51	0.12	225.51	0.12	225.51	0.12	225.51	0.12	225.51	0.12	225.51
5	128	325.51	0.12	325.51	0.12	325.51	0.12	325.51	0.12	325.51	0.12	325.51
6	141	151.71	0.07	151.71	0.07	151.71	0.07	151.71	0.07	151.71	0.07	151.71
7												
8												
9												
10												

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MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 132 ALPHA-MCB = 6.0 FDR RUN-PI 25.36
POINT 26 C-COMP = 33.56
COMPUTED SIGMA = 13.5
FREQUENCY = 19.08, N = 1497

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X = 012-UPPER	CPREAL CPIMAG	062-UPPER	CPREAL CPIMAG	148-UPPER	CPREAL CPIMAG	261-UPPER	CPREAL CPIMAG	392-UPPER	CPREAL CPIMAG	530-UPPER	CPREAL CPIMAG	661-UPPER	CPREAL CPIMAG
1	-1.9472	7.936	-6.768	3.40	-4.077	0.21	-2.810	-2.475	-1.144	-2.401	-1.495	-2.155	-1.655
2	-1.266	1.140	-5.55	1.16	-4.81	0.2135	-4.67	-5.27	0.245	-5.583	0.216	-5.81	0.260
3	-1.149	0.351	-1.86	0.18	-1.76	0.145	-2.31	-2.33	0.24	-2.374	0.19	-2.215	0.10
4	-1.077	0.171	-0.57	0.19	-0.82	0.15	-2.35	-0.33	0.24	-0.337	0.15	-0.336	0.125
5	-0.977	0.099	-0.37	0.16	-0.32	0.17	-0.31	0.33	0.16	-0.36	0.15	-0.36	0.125
6	-0.877	0.066	-0.27	0.14	-0.22	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
7	-0.777	0.033	-0.17	0.12	-0.12	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
8	-0.677	0.011	-0.07	0.10	-0.02	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
9	-0.577	0.006	-0.01	0.08	-0.01	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
10	-0.477	0.003	0.00	0.06	0.00	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125

X = 074-UPPER	CPREAL CPIMAG	062-UPPER	CPREAL CPIMAG	148-UPPER	CPREAL CPIMAG	261-UPPER	CPREAL CPIMAG	392-UPPER	CPREAL CPIMAG	530-UPPER	CPREAL CPIMAG	661-UPPER	CPREAL CPIMAG
1	-1.9472	7.936	-6.768	3.40	-4.077	0.21	-2.810	-2.475	-1.144	-2.401	-1.495	-2.155	-1.655
2	-1.266	1.140	-5.55	1.16	-4.81	0.2135	-4.67	-5.27	0.245	-5.583	0.216	-5.81	0.260
3	-1.149	0.351	-1.86	0.18	-1.76	0.145	-2.31	-2.33	0.24	-2.374	0.19	-2.215	0.10
4	-1.077	0.171	-0.57	0.19	-0.82	0.15	-2.35	-0.33	0.24	-0.337	0.15	-0.336	0.125
5	-0.977	0.099	-0.37	0.16	-0.32	0.17	-0.31	0.33	0.16	-0.36	0.15	-0.36	0.125
6	-0.877	0.066	-0.27	0.14	-0.22	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
7	-0.777	0.033	-0.17	0.12	-0.12	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
8	-0.677	0.011	-0.07	0.10	-0.02	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
9	-0.577	0.006	-0.01	0.08	-0.01	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
10	-0.477	0.003	0.00	0.06	0.00	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125

X = 092-LOWER	CPREAL CPIMAG	062-LOWER	CPREAL CPIMAG	148-LOWER	CPREAL CPIMAG	261-LOWER	CPREAL CPIMAG	392-LOWER	CPREAL CPIMAG	530-LOWER	CPREAL CPIMAG	661-LOWER	CPREAL CPIMAG
1	-1.9472	7.936	-6.768	3.40	-4.077	0.21	-2.810	-2.475	-1.144	-2.401	-1.495	-2.155	-1.655
2	-1.266	1.140	-5.55	1.16	-4.81	0.2135	-4.67	-5.27	0.245	-5.583	0.216	-5.81	0.260
3	-1.149	0.351	-1.86	0.18	-1.76	0.145	-2.31	-2.33	0.24	-2.374	0.19	-2.215	0.10
4	-1.077	0.171	-0.57	0.19	-0.82	0.15	-2.35	-0.33	0.24	-0.337	0.15	-0.336	0.125
5	-0.977	0.099	-0.37	0.16	-0.32	0.17	-0.31	0.33	0.16	-0.36	0.15	-0.36	0.125
6	-0.877	0.066	-0.27	0.14	-0.22	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
7	-0.777	0.033	-0.17	0.12	-0.12	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
8	-0.677	0.011	-0.07	0.10	-0.02	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
9	-0.577	0.006	-0.01	0.08	-0.01	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125
10	-0.477	0.003	0.00	0.06	0.00	0.17	-0.34	0.33	0.16	-0.37	0.15	-0.37	0.125

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MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 130 ALPHA-MCL = 6.0 PDP RUNPT 26.26
RUN 26 ALPHA-PAK = 5 C-COMP = 32596
POINT 5 SIGMA = -135. V-REF = 297.22
COMPUTED FREQUENCY = 17.78. K = .1497
FOUPIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CP-MAG	012-UPPER PHI	148-UPPER CP-MAG	148-UPPER PHI	261-UPPER CP-MAG	261-UPPER PHI	392-UPPER CP-MAG	392-UPPER PHI	510-UPPER CP-MAG	510-UPPER PHI	661-UPPER CP-MAG	661-UPPER PHI
1	142	27.57	163.05	4	527	2	871	2	752	2	822	2	717
2	234	161.57	173.49	4	527	2	871	2	752	2	822	2	717
3	245	262.15	163.49	4	527	2	871	2	752	2	822	2	717
4	245	262.15	163.49	4	527	2	871	2	752	2	822	2	717
5	67	250.27	154.13	4	527	2	871	2	752	2	822	2	717
6	89	342.80	154.13	4	527	2	871	2	752	2	822	2	717
7	89	342.80	154.13	4	527	2	871	2	752	2	822	2	717
8	89	163.66	154.13	4	527	2	871	2	752	2	822	2	717
9	89	282.58	154.13	4	527	2	871	2	752	2	822	2	717
10	89	282.58	154.13	4	527	2	871	2	752	2	822	2	717

X	N	774-UPPER CP-MAG	774-UPPER PHI	860-UPPER CP-MAG	860-UPPER PHI	910-UPPER CP-MAG	910-UPPER PHI	012-LOWER CP-MAG	012-LOWER PHI	062-LOWER CP-MAG	062-LOWER PHI	148-LOWER CP-MAG	148-LOWER PHI	261-LOWER CP-MAG	261-LOWER PHI
1	27	157	163.05	4	177	179.71	2	871	191.75	2	714	204.23	2	822	213.90
2	154	262.57	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72
3	222	254.17	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72
4	222	254.17	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72
5	222	254.17	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72
6	222	254.17	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72
7	222	254.17	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72
8	222	254.17	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72
9	222	254.17	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72
10	222	254.17	4	187	155.94	4	152	159.82	151.75	2	592	154.96	2	622	153.72

X	N	392-LOWER CP-MAG	392-LOWER PHI	530-LOWER CP-MAG	530-LOWER PHI	661-LOWER CP-MAG	661-LOWER PHI	774-LOWER CP-MAG	774-LOWER PHI	860-LOWER CP-MAG	860-LOWER PHI	910-LOWER CP-MAG	910-LOWER PHI
1	12	2.05	390.78	1.76	346.50	1.26	335.35	3.72	351.33	4.87	215.83	7.34	121.97
2	35	2.12	390.82	1.65	346.33	2.07	335.89	2.60	351.25	2.51	215.56	6.25	118.61
3	45	2.12	390.93	2.48	347.92	2.37	335.16	2.45	351.81	1.92	215.22	2.25	118.76
4	57	2.05	390.29	2.44	347.90	2.21	335.29	0.18	351.64	0.94	214.98	0.26	138.00
5	67	2.05	390.22	2.34	347.24	2.24	335.24	0.12	351.11	0.27	213.99	0.26	138.00
6	89	2.05	390.79	2.08	348.81	2.22	335.81	0.36	351.34	0.31	213.55	0.22	129.26
7	91	2.15	390.92	3.08	351.53	2.25	335.00	0.25	351.18	0.33	213.46	0.25	128.39

[illegible]

FOUNDER COEFFICIENTS, REAL & IMAGINARY, AND
*** PLAGE COEFFICIENTS, LOCAL FACTOR, AND
COMPLEXED FREQUENCY = 10.00, ***

[illegible]

X =	774		950		910		N	CMREAL	CMIMAG
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP			
1.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
2.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
3.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
4.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
5.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
6.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
7.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
8.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
9.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732
10.000	1.473	1.797	1.516	1.735	1.443	1.732	1	1.443	1.732

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*** ALL PRESSURES, PC = DATA, ***
*** STABILITY PARAMETER

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[illegible]

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 132 ALPHA-MCL = 6.0 POP RUN.PI 26.76
GUM 28 ALPHA-BA = 135.0 C-COMP = 32596
POINT 3 SIGMA = 19.38 V-PEP = 230.22
COMPUTED FREQUENCY = 19.38 K = .1497

FOUPIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	31.440	248.37	12.697	350.44	8.735	349.74	6.082	355.49	4.436	330.84	5.66	342.30
2	4.65	45.54	1.067	161.97	0.288	155.42	0.052	187.47	0.311	183.46	0.077	184.39
3	4.77	180.18	0.265	4.03	0.358	340.19	0.052	111.18	0.455	103.46	0.022	184.39
4	3.24	72.22	0.56	229.54	0.085	169.66	0.092	261.93	0.16	184.87	0.022	184.39
5	1.16	280.97	0.028	137.79	0.222	138.18	0.017	112.52	0.027	151.78	0.025	175.01
6	0.45	219.57	0.130	247.97	0.029	138.90	0.015	248.25	0.023	127.43	0.025	175.01
7	0.117	334.93	0.346	342.52	0.024	358.17	0.022	336.01	0.024	30.60	0.025	175.01
8	0.086	44.87	0.036	30.52	0.029	20.27	0.025	28.56	0.015	19.40	0.025	175.01
9	0.041	128.37	0.022	154.21	0.011	228.14	0.014	277.59	0.007	318.25	0.011	34.17
10												36.08

X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2.490	339.47	1.349	54.44	1.686	25.95	0.013	147.06	0.007	144.58	0.007	144.58
2	0.154	339.61	0.332	245.98	0.034	174.76	0.029	314.58	0.007	144.58	0.007	144.58
3	0.060	121.24	0.021	336.81	0.014	174.76	0.007	144.58	0.007	144.58	0.007	144.58
4	0.029	143.28	0.022	154.24	0.007	144.58	0.007	144.58	0.007	144.58	0.007	144.58
5	0.024	261.69	0.011	174.66	0.007	144.58	0.007	144.58	0.007	144.58	0.007	144.58
6	0.007	344.54	0.012	174.66	0.007	144.58	0.007	144.58	0.007	144.58	0.007	144.58
7	0.008	30.53	0.015	174.66	0.009	144.58	0.009	144.58	0.009	144.58	0.009	144.58
8	0.012	48.14	0.015	346.00	0.009	144.58	0.009	144.58	0.009	144.58	0.009	144.58
9												
10												

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	3.185	147.45	4.235	342.05	15.334	171.79	2.151	206.29	11.065	32.81	32.81	32.81
2	0.256	159.75	0.353	142.87	0.219	94.23	0.286	162.94	0.102	188.03	0.102	188.03
3	0.357	147.45	0.308	142.87	0.206	94.23	0.277	162.94	0.109	225.96	0.109	225.96
4	0.035	147.45	0.106	142.87	0.053	31.67	0.042	32.55	0.021	325.91	0.021	325.91
5	0.050	147.45	0.038	142.87	0.053	31.67	0.031	32.55	0.021	325.91	0.021	325.91
6	0.016	147.45	0.015	142.87	0.014	197.04	0.054	272.31	0.022	270.19	0.022	270.19
7	0.021	147.45	0.017	142.87	0.014	197.04	0.054	272.31	0.022	270.19	0.022	270.19
8	0.010	147.45	0.017	142.87	0.014	197.04	0.054	272.31	0.022	270.19	0.022	270.19
9	0.010	147.45	0.017	142.87	0.014	197.04	0.054	272.31	0.022	270.19	0.022	270.19
10	0.010	147.45	0.017	142.87	0.014	197.04	0.054	272.31	0.022	270.19	0.022	270.19

*** STABILITY PARAMETER

* XI = .3881

ORIGINAL PAGE IS
OF POOR QUALITY

WGT 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, HALL STATIONS

FILE 103 ALPHA-MCL = 6.0 PDP RUNPT 32424
PUM 23 ALPHA-PAP = 0.5 C-COMP = 32424
POINT 1 SIGMA = -0.1 V-DEF = 190.71
COMPUTED FREQUENCY = 9.77, K = .3714

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	1	-17.852	9.926	-5.717	2.418	-3.550	1.322	-2.292	5.25	-1.752	1.37	-1.558	7.16
2	2	1.425	-0.757	1.247	-0.464	1.446	-0.481	1.397	-0.497	1.465	-0.543	1.520	-0.544
3	3	1.151	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
4	4	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
5	5	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
6	6	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
7	7	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
8	8	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
9	9	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
10	10	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	1	-17.852	9.926	-5.717	2.418	-3.550	1.322	-2.292	5.25	-1.752	1.37	-1.558	7.16
2	2	1.425	-0.757	1.247	-0.464	1.446	-0.481	1.397	-0.497	1.465	-0.543	1.520	-0.544
3	3	1.151	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
4	4	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
5	5	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
6	6	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
7	7	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
8	8	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
9	9	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
10	10	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	1	-17.852	9.926	-5.717	2.418	-3.550	1.322	-2.292	5.25	-1.752	1.37	-1.558	7.16
2	2	1.425	-0.757	1.247	-0.464	1.446	-0.481	1.397	-0.497	1.465	-0.543	1.520	-0.544
3	3	1.151	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
4	4	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
5	5	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
6	6	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
7	7	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
8	8	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
9	9	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490
10	10	1.157	-0.341	1.031	-0.207	1.279	-0.451	1.272	-0.474	1.354	-0.475	1.402	-0.490

ORIGINAL PAGE IS
OF POOR QUALITY

OCW PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 128 ALPHA-WCL = 6.0 POP RUN.PI 22424
RUN 23 ALPHA-BAR = .5 O-COMP = 199.71
POINT 1 ALPHA-SIGMA = -.90 V-REF = .0714
COMPUTED FREQUENCY = 9.07, K = .0714
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	19	9.326	153.47	6.204	157.78	3.789	159.58	2.357	162.46	1.757	164.47	1.757	164.47
2	1	4.358	353.35	1.312	18.17	1.357	19.41	1.344	19.84	1.433	19.32	1.433	19.32
3	4	1.98	350.89	.095	169.22	.086	189.19	.039	182.06	.213	186.54	.213	186.54
4	5	.384	186.62	.211	102.30	.208	102.82	.088	87.13	.103	191.79	.103	191.79
5	6	.159	36.23	.211	1.25	.208	371.64	.213	7.72	.213	10.96	.213	10.96
6	7	.159	258.58	.191	272.21	.165	271.33	.169	270.89	.173	269.37	.173	269.37
7	8	.123	206.29	.119	191.87	.133	197.87	.099	184.94	.107	176.80	.107	176.80
8	9	.795	295.33	.119	191.87	.133	197.87	.099	184.94	.107	176.80	.107	176.80
9	10	.037	52.78	.354	116.56	.350	100.44	.030	125.11	.038	143.97	.038	143.97

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	7.74	222.88	.860	227.83	.574	223.39	1.0	224.3	.873	224.73	.873	224.73
2	2	1.456	19.93	1.487	22.26	1.481	19.00	1.275	12.86	1.364	16.72	1.364	16.72
3	3	.221	187.82	.221	188.13	.215	185.14	.198	173.46	.201	182.69	.201	182.69
4	4	.113	147.70	.105	193.07	.105	185.86	.116	183.51	.085	184.09	.085	184.09
5	5	.159	17.47	.161	14.26	.155	11.38	.137	10.74	.163	12.28	.163	12.28
6	6	.112	257.28	.120	251.36	.127	244.09	.136	294.44	.093	271.91	.093	271.91
7	7	.060	154.28	.061	147.36	.057	150.66	.051	163.13	.063	153.92	.063	153.92
8	8	.042	169.20	.039	163.49	.044	165.96	.049	152.44	.027	173.76	.027	173.76

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	8.50	348.08	1.704	357.74	1.381	359.94	.872	331.52	.804	326.11	.804	326.11
2	2	1.679	17.17	1.577	18.21	1.388	17.61	1.522	19.98	1.429	19.50	1.429	19.50
3	3	.188	181.05	.226	186.62	.213	181.79	1.222	182.91	.187	174.16	.187	174.16
4	4	.090	181.05	.126	17.34	.094	181.02	.122	181.58	.183	185.91	.183	185.91
5	5	.153	261.73	.192	253.35	.192	250.49	.201	249.17	.185	247.48	.185	247.48
6	6	.068	275.14	.127	151.00	.116	154.39	.122	152.54	.114	147.13	.114	147.13
7	7	.022	159.97	.072	279.55	.054	277.50	.039	267.17	.054	260.16	.054	260.16
8	8	.022	159.97	.027	166.24	.011	173.11	.014	139.09	.024	160.24	.024	160.24


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OCWJ PERIODICITY TEST
MODE 1 -- CENTER PLANE DATA, WALL STATIONS
FILE 123 ALPHA-WCL = 6.0 POP RUMPT 27.525
DUN 123 ALPHA-PAR = .5 C-COMP 3242.4
POINT 1 SIGMA = -9.5 V-PEF = 199.71
COMPUTED FREQUENCY = 9.07, K = .0714
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, MOMENT, PEP RADIAN ***

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 4.07; K =

X	\bullet_{017}	\bullet_{62}	\bullet_{148}	\bullet_{261}	\bullet_{392}	\bullet_{570}	\bullet_{661}
N	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	12.411	-3.702	-2.625	5.179	-1.479	3.268	2.588
2	10.039	-3.314	-2.022	0.336	-1.421	-	1.026
3	0.029	-3.058	-0.774	0.366	-0.519	-	-0.075
4	0.014	-2.608	0.004	0.364	-0.519	-	0.010
5	0.044	-2.421	0.067	0.219	-0.177	-	-0.014
6	0.044	-2.369	0.026	0.254	-0.231	-	-0.007
7	0.024	-2.367	0.070	0.263	-0.234	-	-0.005
8	0.031	-2.311	0.043	0.235	-0.158	-	-0.013
9	0.034	-2.277	0.035	0.225	-0.145	-	-0.009
10	0.011	-2.227	0.043	0.235	-0.101	-	-0.002

X =	DELCPY ⁷⁷⁴	DELCPY ^{86C}	DELCPY ^{91D}	N	CNREAL	CNIMAG	N	CHREAL	CHIMAG
1	1.559	.774	1.021	1	4.501	-.634	1	1.018	-.569
2	1.276	-.042	1.019	2	-.078	-.033	2	-.016	-.006
3	1.019	-.042	-.027	3	-.022	-.033	3	-.015	-.006
4	1.008	.030	-.027	4	-.009	-.033	4	-.008	-.002
5	1.012	.030	-.013	5	-.023	-.033	5	-.006	-.003
6	1.037	.017	-.013	6	-.006	-.015	6	-.002	-.005
7	1.035	-.017	-.006	7	-.019	-.026	7	-.003	-.007
8	1.037	-.033	-.003	8	-.033	-.033	8	-.003	-.003
9	1.031	-.024	.001	9	-.037	-.033	9	-.003	-.003
10	1.031	-.023	.001	10	-.007	-.013	10	-.004	-.003

[illegible]

WALL HT. CAP. FRACTION	N	W1 CPREAL	W1 CPIMAG	W2 CPREAL	W2 CPIMAG	W4 CPREAL	W4 CPIMAG	W6 CPREAL	W6 CPIMAG	W10 CPREAL	W10 CPIMAG
1	1	1.805	-.597	4.277	-.748	-1.764	4.993	-1.407	2.99	2.217	9.682
2	2	1.634	-.644	1.869	-.255	-1.175	4.920	-.571	-.639	1.380	9.539
3	3	1.921	-.556	1.859	-.125	1.175	4.976	1.685	-.544	1.334	9.076
4	4	1.734	-.571	1.914	-.119	1.171	4.921	-.291	-.623	1.377	9.134
5	5	1.711	-.566	1.947	-.117	1.156	4.921	-.341	-.633	1.365	9.111
6	6	1.773	-.563	1.944	-.117	1.144	4.931	-.348	-.614	1.377	9.176
7	7	1.833	-.569	1.937	-.119	1.144	4.922	-.348	-.614	1.377	9.169
8	8	1.833	-.569	1.937	-.119	1.144	4.922	-.348	-.614	1.377	9.169
9	9	1.817	-.569	1.929	-.117	1.132	4.922	-.333	-.626	1.375	9.060

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 117 ALPHA-MCL = 6.0 PRP RUN-PT 33.07
 RUN 23 ALPHA-SAR = 9.5 C-COMP = 32343
 POINT 3 SIGMA = -9.5 V-REF = 199.45
 COMPUTED FREQUENCY = 15.57, K = .1226

FOURIER COEFFICIENTS, REAL & IMAGINARY
 ** BLADE PRESSURES, PER RADIAN **

X	N	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG
1	1	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
2	2	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
3	3	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
4	4	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
5	5	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
6	6	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
7	7	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
8	8	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
9	9	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
10	10	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117

X	N	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG
1	1	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
2	2	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
3	3	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
4	4	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
5	5	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
6	6	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
7	7	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
8	8	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
9	9	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
10	10	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117

X	N	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG	CP=REAL CPI=IMAG
1	1	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
2	2	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
3	3	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
4	4	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
5	5	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
6	6	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
7	7	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
8	8	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
9	9	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117
10	10	-1.5234	9.993	-5.959	1.779	-2.831	-3.353	-2.445	-1.117

*** STABILITY PARAMETER

OCWF PERIODICITY TEST

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

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112 ALPHA-WCL = 6.2      PCP RUN.PT = 32.59
113 ALPHA-DAR = 0.2      C-CORP = 32.76
114 COMPUTED FREQUENCY = 19.16      K CEF = 198.61
115 SIGNA = -0.1         V = 1316

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FOURIER COEFFICIENTS, REAL & IMAGINARY
COMPUTED IN
COIN.

** BLAGE PRESSURES, PER RADIAN ***

X	CP	012-UPPER CPREAL CPIWAG	162-UPPER CPREAL CPIWAG	148-UPPER CPREAL CPIWAG	261-UPPER CPREAL CPIWAG	392-UPPER CPREAL CPIWAG	531-UPPER CPREAL CPIWAG	661-UPPER CPREAL CPIWAG
1	15.163	9.578	-5.937	-3.811	-3.336	-2.356	-2.264	-1.933
2	11.221	5.508	-4.124	-3.622	-3.361	-2.472	-2.446	-1.933
3	9.133	3.551	-3.113	-2.197	-1.916	-1.833	-1.776	-1.669
4	7.261	2.043	-1.908	-1.022	-0.926	-0.933	-1.030	-0.987
5	5.715	1.028	-1.206	-0.677	-0.667	-0.743	-0.832	-0.809
6	4.427	0.569	-0.773	-0.356	-0.677	-0.592	-0.664	-0.602
7	3.366	0.312	-0.510	-0.247	-0.677	-0.592	-0.664	-0.602
8	2.500	0.176	-0.310	-0.147	-0.677	-0.592	-0.664	-0.602

X =	.774-UPPER CPREAL CPI MAG	.803-UPPER CPREAL CPI MAG	.910-UPPER CPREAL CPI MAG	.012-LOWER CPREAL CPI MAG	.062-LOWER CPREAL CPI MAG	.148-LOWER CPREAL CPI MAG	.261-LOWER CPREAL CPI MAG
1	-1.573	-1.166	-1.455	8.977	4.551	3.191	2.093
2	-1.732	-1.336	-1.334	13.191	11.29	3.942	2.403
3	-1.932	-1.534	-1.032	15.69	11.9	3.67	2.67
4	-2.132	-1.736	-0.819	12.29	11.4	3.030	2.051
5	-2.332	-1.936	-0.602	10.12	10.5	2.26	1.385
6	-2.532	-2.134	-0.39	8.035	8.265	1.41	0.624
7	-2.732	-2.336	-0.22	6.033	6.365	1.12	0.257
8	-2.932	-2.534	-0.09	4.031	4.265	0.808	0.020
9	-3.132	-2.736	-0.02	2.03	2.265	0.408	0.02

[illegible]

ORIGINAL DATA
OF POOR QUALITY

MODE 1 --- OCW PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 113 ALPHA-MAG = 6.0 POP RUNPT 3309
POINT 5 ALPHA-MAG = -9.5 C-COMP = 3276
COMPUTED FREQUENCY = 19.16, K = .1516
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	19	787	149.75	6	375	160.12	3	978	168.44	2	740	183.76	2	513	200.49
2	1	545	15.09	107	12.51	189.20	362	183.12	183.12	183.12	183.12	183.12	183.12	183.12	183.12
3	4	545	248.30	107	12.51	189.20	362	183.12	183.12	183.12	183.12	183.12	183.12	183.12	183.12
4	5	234	58.70	202	14.55	145.77	165.69	165.69	165.69	165.69	165.69	165.69	165.69	165.69	165.69
5	7	134	96.20	045	23.66	236.66	265.73	265.73	265.73	265.73	265.73	265.73	265.73	265.73	265.73
6	9	334	226.26	093	175.61	175.61	222.57	222.57	222.57	222.57	222.57	222.57	222.57	222.57	222.57
7	8	066	307.48	041	353.75	353.75	44.16	44.16	44.16	44.16	44.16	44.16	44.16	44.16	44.16
8	9	067	351.72	041	353.75	353.75	44.16	44.16	44.16	44.16	44.16	44.16	44.16	44.16	44.16
9															
10															

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	237	226.47	1	456	229.14	1	456	229.14	9	569	326.98	5	101	330.04
2	3	145	192.50	073	27.97	27.97	195.66	195.66	195.66	176	125.49	125.49	176	125.49	125.49
3	4	089	170.77	015	352.92	352.92	236.82	236.82	236.82	035	109.14	109.14	035	109.14	109.14
4	5	054	233.95	047	236.82	236.82	40.33	40.33	40.33	012	137.57	137.57	012	137.57	137.57
5	6	029	226.17	065	40.33	40.33	236.82	236.82	236.82	038	157.11	157.11	038	157.11	157.11
6	7	029	226.17	065	40.33	40.33	236.82	236.82	236.82	038	157.11	157.11	038	157.11	157.11
7	8														
8	9														
9	10														

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	3	237	226.47	1	456	229.14	1	456	229.14	9	569	326.98	5	101	330.04
2	4	089	170.77	015	352.92	352.92	236.82	236.82	236.82	035	109.14	109.14	035	109.14	109.14
3	5	029	226.17	065	40.33	40.33	236.82	236.82	236.82	038	157.11	157.11	038	157.11	157.11
4	6														
5	7														
6	8														
7	9														
8	10														

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 113 ALPHA-MCL = 6.0 P*P RUV.PI 27.09
RUN 123 ALPHA-PAR = .5 C-COMP = .3270
POINT 5 SIGMA = -.93 V-DEF = 198.61
S COMPUTED FREQUENCY = 12.16, K = .1316

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	C ¹²		C ¹⁴⁸		C ²⁶¹		C ³⁹²		C ⁵³⁰		C ⁶⁶¹	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	24.17	14.798	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
2	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
3	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
4	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
5	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
6	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
7	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
8	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
9	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
10	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252

N	C ¹²		C ¹⁴⁸		C ²⁶¹		C ³⁹²		C ⁵³⁰		C ⁶⁶¹	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
2	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
3	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
4	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
5	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
6	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
7	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
8	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
9	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679
10	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679	1.341	1.679

*** STABILITY PARAMETER

* XI = .6227

*** WALL PRESSURES, PER RADIAN ***

N	C ¹²		C ¹⁴⁸		C ²⁶¹		C ³⁹²		C ⁵³⁰		C ⁶⁶¹	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	24.17	14.798	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
2	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
3	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
4	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
5	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
6	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
7	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
8	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
9	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252
10	22.33	13.537	10.358	-4.411	6.091	-2.947	4.779	-1.252	3.521	0.55	2.519	1.252

ORIGINAL PAGE IS
OF POOR QUALITY

CCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 112 ALPHA-WCL = 6.0 POP RUN-PI 2307
PCW ALPHA-SAR = .5 C-COMP-PI 3207
POINT 5 SIGMA = -93 V-DEF = 193.61
5 COMPUTED FREQUENCY = 19.16, X = .1516

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
2	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
3	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
4	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
5	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
6	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
7	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
8	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
9	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
10	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
2	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
3	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
4	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
5	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
6	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
7	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
8	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
9	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72
10	23.233	328.57	11.252	336.23	7.537	327.12	4.521	325.72	3.521	325.72

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
GAP FRACTION	1	2	3	4	5	6	7	8	9	10
1	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
2	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
3	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
4	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
5	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
6	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
7	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
8	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
9	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32
10	2.278	336.61	1.290	162.39	1.538	328.32	28.32	328.32	328.32	328.32

*** STABILITY PARAMETER

* XI = .6223

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 103 ALPHA-MCL = 6.0 PDP RUN.PT 22.01
RUN 22 ALPHA-RAP = .5 Q-COMP = .33188
POINT 1 SIGMA = .45 V-REF = 202.05
COMPUTED FREQUENCY = 9.07, K = .0705

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	-10	.025	7.604	-4.692	-3.266	-2.249	-1.893	-1.656	-1.317
2	-730	.059	.110	-592	.521	.345	.601	.651	.653
3	.048	.086	.141	-782	.776	.778	.831	.846	.820
4	.007	.162	.118	-956	.047	.038	.029	.020	.017
5	.043	.198	.140	-390	.344	.034	.032	.036	.048
6	.009	.135	.120	-134	.290	.107	.186	.376	.354
7	.043	.053	.109	-264	.109	.306	.108	.193	.190
8	.003	.035	.029	-204	.208	.113	.055	.221	.197
9	.043	.015	.043	-040	.053	.065	.010	.046	.050
10			.035	.026	.016	.040	.049	.042	.012

X	N	CPREAL	CPIMAG	.860-UPPER	.910-UPPER	.012-LOWER	.062-LOWER	.148-LOWER	.261-LOWER
1	-1	.028	-2.443	.851	.743	4.761	1.845	1.326	.717
2	.034	.387	.337	.664	.644	.755	.618	.615	.628
3	.031	.456	.446	.319	.821	.782	.752	.757	.777
4	.016	.168	.162	.017	.010	.072	.013	.041	.029
5	.033	.070	.089	.052	.043	.008	.025	.015	.017
6	.022	.343	.303	.346	.343	.284	.425	.374	.331
7	.075	.069	.060	.221	.218	.237	.215	.237	.188
8	.017	.017	.058	.162	.172	.073	.230	.229	.209
9	.047	.054	.058	.738	.031	.028	.057	.052	.041
10	.003	.041	.041	.700	.006	.012	.007	.010	.005

X	N	CPREAL	CPIMAG	.530-LOWER	.661-LOWER	.774-LOWER	.860-LOWER	.910-LOWER	
1	-1	.808	-1.349	.116	.026	.266	.504	.041	
2	.280	.349	.435	.689	.622	.666	.662	.615	.182
3	.714	.155	.455	.991	.791	.879	.805	.820	.414
4	.019	.013	.109	.041	.010	.010	.029	.017	.400
5	.031	.080	.100	.061	.061	.073	.057	.043	.165
6	.330	.387	.340	.340	.340	.332	.331	.314	.065
7	.004	.007	.001	.001	.001	.001	.239	.239	.089
8	.101	.005	.004	.222	.183	.002	.159	.162	.009
9	.150	.049	.044	.054	.043	.058	.050	.036	.046
10	.015	.015	.021	.012	.008	.014	.027	.014	.020

9CWI PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 103 ALPHA-MCL = 6.0 PDP RUN.PT 22.01
RUN 22 ALPHA-BAR = .5 Q-COMP = .33182
POINT 1 SIGMA = -.45 V-REF = 202.05
COMPUTED FREQUENCY = 9.07, K = .0705
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	13	056	144.41	4.853	165.21	3.269	177.46	2.371	198.49	2.461	219.71	2.791	233.60	2.880	242.78
2	2	738	8.52	712	146.03	2.882	141.99	.653	146.00	.720	147.17	.759	149.32	.759	149.32
3	4	445	277.68	.898	330.51	.268	331.39	.881	332.05	.942	333.42	.942	333.42	.942	333.42
4	5	60	50.70	.133	242.73	.147	252.25	.153	255.54	.161	259.42	.166	264.14	.166	264.14
5	6	162	92.45	.150	68.11	.129	68.62	.114	70.15	.089	68.90	.099	69.87	.090	58.10
6	7	116	248.40	.446	216.71	.450	220.11	.453	222.48	.491	223.32	.517	223.28	.486	223.87
7	8	135	267.32	.178	221.39	.173	219.30	.195	215.43	.216	210.22	.210	203.41	.203	199.96
8	9	108	51.10	.267	10.79	.207	21.98	.211	31.18	.229	59.36	.221	57.09	.198	47.36
9	10	045	340.70	.073	53.26	.084	55.00	.084	58.41	.097	55.36	.083	57.89	.074	47.36
10				.046	50.26	.051	59.55	.044	58.41	.050	78.87	.042	93.97	.047	104.35

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	651	247.18	2.469	249.84	2.772	250.42	7.277	310.87	3.337	303.57	3.721	294.48	2.496	286.69
2	3	743	148.35	.949	149.73	.934	148.62	.835	154.04	.886	155.49	.854	148.41	.869	147.90
3	4	170	264.73	.169	264.11	.163	266.32	.164	244.05	.179	257.83	.174	256.46	.173	260.24
4	5	079	61.57	.096	57.24	.099	64.45	.064	97.45	.042	99.63	.090	80.70	.084	76.06
5	6	215	226.39	.429	225.00	.457	221.33	.575	209.58	.542	218.37	.494	220.43	.478	226.03
6	7	176	6.09	.163	19.24	.226	195.62	.227	189.38	.225	197.12	.221	357.36	.209	206.03
7	8	077	69.90	.086	54.81	.172	62.35	.264	343.79	.231	354.18	.073	45.17	.219	55.92
8	9	041	93.77	.033	90.79	.041	81.20	.019	38.36	.016	63.46	.018	56.37	.022	75.67
10															

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	830	278.80	1.915	273.47	1.654	270.90	1.355	258.68	1.684	252.58	1.183	272.00	1.183	272.00
2	2	603	148.21	.815	147.77	.731	148.25	.993	146.23	.784	147.61	.741	146.03	.741	146.03
3	3	156	332.91	1.000	332.94	.285	333.30	.993	332.61	.907	332.61	.913	333.99	.869	333.38
4	4	086	68.53	.154	264.06	.154	267.47	.151	266.31	.139	257.94	.156	275.84	.156	275.84
5	5	055	223.47	.108	225.26	.081	224.88	.100	222.02	.153	223.02	.078	225.08	.078	225.08
6	6	216	199.11	.274	200.68	.481	201.74	.496	222.02	.453	198.71	.444	198.59	.429	198.59
7	7	192	358.61	.223	1.16	.247	201.59	.279	359.36	.259	359.13	.252	198.59	.252	198.59
8	8	071	44.44	.083	48.70	.185	45.55	.207	47.42	.062	35.79	.162	52.12	.162	52.12
9	9	020	50.21	.024	60.35	.021	65.78	.015	99.71	.029	21.64	.025	54.54	.025	54.54
10	10														

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 103 ALPHA-MCL = 6.0 POP RUN-PT 22.01
RUN 22 ALPHA-BAR = 0.5 O-COMP = .33188
POINT 1 SIGMA = -45. V-DEF = .202.05
COMPUTED FREQUENCY = 9.07, K = .0705

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	15.387	-13.107	6.537	-4.019	4.592	-3.058	2.966
2	-1.485	.258	-.024	-.100	-.020	-.026	-.082
3	.723	.094	-.030	-.067	-.004	-.023	-.001
4	-.120	-.234	-.023	-.056	-.032	-.024	-.009
5	-.001	-.099	-.065	-.062	-.032	-.031	-.021
6	-.458	.176	-.026	-.051	-.023	-.032	-.028
7	-.217	-.098	-.026	-.051	-.023	-.032	-.028
8	-.040	-.129	-.026	-.051	-.023	-.032	-.028
9	-.027	.027	-.022	-.021	-.016	-.011	-.001
10							

X =	.774	.860	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	.762	1.115	.022
2	.308	-.027	.032
3	.006	.019	.009
4	.023	.009	.011
5	-.043	.011	.008
6	-.065	.008	.002
7	.032	.002	.000
8	.016	.000	.000
9	.000	.000	.000
10			

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	N	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	1	-.441	-2.542	3.022	-2.214
2	2	-.792	-.547	-.740	-.219
3	3	1.045	-.224	-.905	-.715
4	4	-.007	-.103	-.205	-.220
5	5	-.511	-.305	-.593	-.222
6	6	-.213	-.137	-.338	-.187
7	7	-.312	-.359	-.412	-.057
8	8	-.037	.305	.080	-.949
9	9				-.378
10	10				

*** STABILITY PARAMETER

* * XI = .5770 *
* * * *****

MODE 1 -- CENTER PERIODICITY TEST
 FILE 103 ALPHA-MCL = 6.0 POP RUN-PT 22.01
 RUN 22 ALPHA-BAR = .5 Q-COMP = .33186
 POINT 1 SIGMA = -45. V-REF = 202.05
 1 COMPUTED FREQUENCY = 9.07, K = .0705
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	20.212	319.57	7.674	328.42	5.517	326.34	3.388	331.07	2.186	333.80	1.076	340.04
2	1.507	170.14	.104	254.35	.097	195.31	.085	162.50	.058	315.13	.046	355.02
3	.729	170.42	.073	113.83	.021	198.62	.023	92.88	.136	149.52	.019	113.93
4	.263	242.79	.061	292.51	.030	277.95	.024	292.05	.011	117.84	.019	146.69
5	.099	269.20	.093	221.83	.045	223.59	.032	229.16	.004	259.22	.038	48.67
6	.490	201.02	.094	225.35	.044	227.59	.019	274.42	.036	44.43	.010	340.81
7	.239	155.72	.096	147.73	.080	156.16	.036	142.42	.042	115.06	.064	191.72
8	.248	329.10	.066	293.00	.046	301.17	.018	273.83	.051	232.49	.028	209.81
9	.040	189.55	.003	199.32	.017	281.18	.013	203.00	.031	263.35	.013	313.66
10	.039	135.54	.030	223.27	.033	241.24	.022	241.11	.033	275.52	.026	304.82

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.350	55.63	.792	64.00	1.199	49.13	2.755	342.37	.060	172.76	.030	181.63
2	.023	69.31	.032	86.58	.031	90.11	.033	170.98	.015	287.54	.006	13.42
3	.078	355.03	.034	138.60	.028	353.40	.015	287.54	.015	287.54	.008	255.79
4	.019	72.37	.007	43.43	.024	271.47	.026	224.47	.026	224.47	.012	222.18
5	.025	166.28	.040	68.21	.032	337.57	.029	168.60	.029	168.60	.007	127.31
6	.065	187.32	.022	214.72	.030	223.92	.026	284.50	.026	284.50	.002	183.64
7	.038	326.96	.030	220.19	.016	128.46	.012	272.47	.012	272.47	.003	175.93
8	.018	330.70	.022	304.38	.013	292.49	.022	274.64				
9	.026	270.45			.022	291.25						
10												

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	580	260.17	3.746	323.77	11.702	163.87	2.466	217.18	7.513	103.96	
2	1	963	145.33	.772	163.47	1.366	144.75	.826	146.50	.850	153.11	
3	4	196	330.91	1.153	321.72	1.124	351.90	1.065	331.68	1.043	342.35	
4	5	251	243.26	.313	229.51	.159	349.21	.228	261.98	.205	137.47	
5	6	183	87.97	.223	299.10	.153	339.88	.116	225.14	.348	222.67	
6	7	846	212.72	.666	208.87	.573	221.07	.594	225.14	.421	222.36	
7	8	257	212.23	.386	208.91	.296	221.51	.241	213.61	.301	201.65	
8	9	340	4.08	.416	352.09	.349	21.19	.269	50.93	.155	42.23	
9	10	090	33.63	.094	31.24	.202	55.40	.116	66.84	.209	121.54	
10		.009	33.36	.079	276.36	.076	52.90	.050	66.84	.136	169.09	

*** STABILITY PARAMETER

* XI = .5770 *
 * *****

ORIGINAL PAGE IS
 OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 105 ALPHA-MCL = 6.0 PDP RUN-PT 22.07
RUN 22 ALPHA-BAP = .5 Q-COMP = .33289
POINT 33 SIGMA = -.45 V-REF = 202.36
COMPUTED FREQUENCY = 15.40, K = .1196

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	9	-.002	7.926	1.876	-.343	-.378	-.343	-.378
2	8	-.041	-.022	-.040	-.040	-.040	-.040	-.040
3	7	-.040	-.062	-.040	-.040	-.040	-.040	-.040
4	6	-.034	-.099	-.034	-.034	-.034	-.034	-.034
5	5	-.031	-.107	-.031	-.031	-.031	-.031	-.031
6	4	-.034	-.031	-.034	-.034	-.034	-.034	-.034
7	3	-.042	-.010	-.042	-.042	-.042	-.042	-.042
8	2	-.019	-.022	-.019	-.019	-.019	-.019	-.019
9	1	-.019	-.022	-.019	-.019	-.019	-.019	-.019
10	0	-.019	-.022	-.019	-.019	-.019	-.019	-.019

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.912-UPPER CPREAL CPIMAG	.912-UPPER CPREAL CPIMAG	.912-UPPER CPREAL CPIMAG	.912-UPPER CPREAL CPIMAG
1	9	-.367	1.860	1.702	-.335	-.335	-.335	-.335
2	8	-.331	-.024	-.024	-.024	-.024	-.024	-.024
3	7	-.045	-.033	-.033	-.033	-.033	-.033	-.033
4	6	-.045	-.033	-.033	-.033	-.033	-.033	-.033
5	5	-.045	-.033	-.033	-.033	-.033	-.033	-.033
6	4	-.045	-.033	-.033	-.033	-.033	-.033	-.033
7	3	-.045	-.033	-.033	-.033	-.033	-.033	-.033
8	2	-.045	-.033	-.033	-.033	-.033	-.033	-.033
9	1	-.045	-.033	-.033	-.033	-.033	-.033	-.033
10	0	-.045	-.033	-.033	-.033	-.033	-.033	-.033

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG	.912-LOWER CPREAL CPIMAG
1	9	-.795	1.196	1.196	-.331	-.331	-.331	-.331
2	8	-.294	-.024	-.024	-.024	-.024	-.024	-.024
3	7	-.047	-.033	-.033	-.033	-.033	-.033	-.033
4	6	-.047	-.033	-.033	-.033	-.033	-.033	-.033
5	5	-.047	-.033	-.033	-.033	-.033	-.033	-.033
6	4	-.047	-.033	-.033	-.033	-.033	-.033	-.033
7	3	-.047	-.033	-.033	-.033	-.033	-.033	-.033
8	2	-.047	-.033	-.033	-.033	-.033	-.033	-.033
9	1	-.047	-.033	-.033	-.033	-.033	-.033	-.033
10	0	-.047	-.033	-.033	-.033	-.033	-.033	-.033

MODE 1 -- OCWT PERIODICITY TEST
 CENTER BLADE DATA, WALL STATIONS

FILE 105 ALPHA-MCL = 6.0 PDP RUN.PT 22.07
 RUN 23 ALPHA-BAR = 3.3289 Q-COMP =
 POINT 3 SIGMA = -4.5 V-REF = 202.36
 COMPUTED FREQUENCY = 15.40, K = .1196

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI		
1	12	.994	138.64	.420	153.61	2	.595	164.40	1	.620	191.60	1	.625	222.65	2	.078	252.70
2	13	.458	333.82	.345	173.41	2	.254	169.77	1	.388	357.25	1	.312	163.43	3	.341	354.20
3	14	.074	337.20	.406	357.50	1	.388	.66	1	.423	358.04	1	.423	358.04	4	.375	354.20
4	15	.091	81.11	.128	108.92	1	.119	112.97	1	.177	108.74	1	.177	108.74	5	.179	371.58
5	16	.104	70.80	.088	138.15	1	.084	156.06	1	.060	169.22	1	.068	184.63	6	.155	371.58
6	17	.111	285.07	.034	161.46	1	.037	264.06	1	.038	218.75	1	.036	205.40	7	.179	371.58
7	18	.068	153.23	.034	161.46	1	.035	194.86	1	.073	85.02	1	.039	203.69	8	.179	371.58
8	19	.051	48.18	.075	176.60	1	.079	179.54	1	.073	85.02	1	.039	203.69	9	.179	371.58
9	20	.043	193.63	.042	194.89	1	.047	235.54	1	.040	198.57	1	.034	311.64	10	.179	371.58
		.029	229.32	.025	257.42	1	.020	286.04	1	.025	198.57	1	.034	311.64			

X	N	.774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.148-LOWER		.261-LOWER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.896	258.82	1.709	264.69	1.485	267.25	6.985	312.25	3.451	317.79	2.806	305.79	2.123	303.77
2	2	.896	258.82	1.314	258.80	1.336	265.02	5.509	344.67	.347	350.23	.338	351.03	.333	349.35
3	3	.403	111.57	1.182	112.37	.410	155.02	.351	144.67	.401	155.23	.358	154.99	.333	149.88
4	4	.056	225.86	1.048	231.00	.175	111.22	.142	104.45	.157	101.68	.165	102.61	.157	101.68
5	5	.013	226.17	.048	239.82	.040	226.06	.009	109.19	.066	185.68	.055	182.60	.052	179.88
6	6	.032	239.82	.023	265.97	.020	280.06	.034	269.01	.032	257.17	.024	220.57	.027	236.04
7	7	.075	88.91	.022	89.92	.017	211.30	.059	100.88	.036	205.27	.021	229.97	.037	200.37
8	8	.031	196.35	.031	194.44	.029	183.59	.020	325.68	.019	329.22	.016	311.94	.037	318.11
9	9	.022	317.88	.023	324.22	.023	315.53	.020	325.68	.019	329.22	.019	311.94	.026	337.04

X	N	=	.392-LOWER CP-MAG	PHI	.530-LOWER CP-MAG	PHI	.661-LOWER CP-MAG	PHI	.774-LOWER CP-MAG	PHI	.860-LOWER CP-MAG	PHI	.930-LOWER CP-MAG	PHI
1	388		300.59	4	1.316	320.11	1.103	297.30	.730	301.40	.814	266.51	.944	315.39
2	371		163.85	5	.368	166.94	.331	164.99	.316	170.49	.379	162.53	.255	167.18
3	371		108.14	6	.451	111.87	.391	157.13	.429	155.74	.364	153.03	.377	137.37
4	352		188.24	7	.176	111.87	.155	111.41	.171	116.08	.152	118.66	.171	123.59
5	345		241.28	8	.016	224.31	.023	211.88	.037	132.44	.019	309.37	.020	123.50
6	327		233.38	9	.032	223.05	.045	217.36	.011	208.27	.011	378.51	.034	190.67
7	319		319.71	10	.027	313.22	.049	218.44	.025	185.57	.062	182.50	.053	190.67
8	307		319.71	11	.022	316.04	.027	196.77	.030	185.57	.012	317.54	.029	190.67
9	299		319.71	12	.022	316.04	.027	196.77	.030	185.57	.012	317.54	.029	190.67

ORIGINAL DATA OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 195 ALPHA-MCL = 6.0 POP PUN.PI 22.07
RUN 22 ALPHA-PAP = 5.5 Q-COMP = 33289
POINT 3 SIGMA = -45.0 V-REF = 202.56
COMPUTED FREQUENCY = 15.40, W = .1196

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X = .012		.362		.148		.261		.392		.530		.661	
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	13.608	-13.097	6.341	-4.149	4.199	-3.055	2.754	-1.445	1.901	-.095	1.574	-.544	1.122
2	-.689	-.376	-.001	-.016	-.060	-.062	-.072	-.030	-.001	-.001	-.023	-.018	1.004
3	-.378	-.031	-.006	-.016	-.004	-.042	-.005	-.006	-.053	-.012	-.019	-.008	-.017
4	-.050	-.048	-.010	-.033	-.003	-.048	-.006	-.007	-.010	-.023	-.001	-.004	-.018
5	-.110	-.112	-.001	-.065	-.012	-.036	-.005	-.029	-.020	-.002	-.034	-.006	-.023
6	-.060	-.065	-.007	-.042	-.003	-.027	-.013	-.021	-.019	-.002	-.015	-.017	-.008
7	-.045	-.045	-.013	-.023	-.015	-.007	-.016	-.034	-.025	-.009	-.003	-.004	-.007
8	-.017	-.020	-.007	-.014	-.014	-.026	-.021	-.016	-.001	-.029	-.003	-.004	-.014
9	-.036	-.010	-.007	-.005	-.007	-.005	-.014	-.015	-.011	-.000	-.003	-.005	-.026
10			-.021	-.015	-.007	-.005	-.007	-.005	-.009	-.014	-.001	-.011	-.003

X = .774		.860		.910			
N	DELCPR	DELCPI	DELCPR	DELCPI	N	CMREAL	CMIMAG
1	748	1.236	1.238	.744	1	2.385	-.748
2	.020	-.036	-.026	.009	2	-.043	.013
3	.026	-.008	-.052	.031	3	.006	-.004
4	-.006	-.005	-.004	-.035	4	-.001	-.005
5	-.019	-.005	-.003	.014	5	.013	-.006
6	-.037	-.021	-.002	.022	6	-.016	-.004
7	-.006	-.016	-.015	-.007	7	.000	-.002
8	-.007	-.010	-.012	.003	8	-.003	-.000
9	-.000	-.003	-.011	.008	9	.003	-.001
10	-.007	-.003	-.010	.002	10	-.001	-.000

*** WALL PRESSURES, PER RADIAN ***

WALL NO.		.125		.002		.125		.002		.125		.002	
N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG
1	288	-1.338	3.550	-1.713	-10.142	4.306	-1.181	-.822	-1.017	7.582	1.125	-.607	7.582
2	-.357	-.125	-.128	-.049	-.517	-.473	-.384	-.006	-.601	-.156	1.017	-.461	-.156
3	-.568	-.155	-.706	-.104	-.610	-.015	-.514	-.006	-.065	-.037	1.125	-.065	-.037
4	-.077	-.233	-.399	-.035	-.059	-.169	-.058	-.008	-.015	-.131	1.017	-.015	-.131
5	-.102	-.031	-.153	-.034	-.081	-.098	-.018	-.032	-.032	-.120	1.017	-.032	-.120
6	-.022	-.024	-.153	-.019	-.059	-.066	-.038	-.033	-.051	-.074	1.017	-.051	-.074
7	-.037	-.073	-.117	-.077	-.026	-.125	-.001	-.004	-.037	-.089	1.017	-.037	-.089
8	-.010	-.075	-.044	-.052	-.039	-.011	-.037	-.002	-.011	-.011	1.017	-.011	-.011
9	-.012	-.007	-.044	-.052	-.039	-.011	-.037	-.002	-.011	-.011	1.017	-.011	-.011
10	-.014	-.020	-.055	-.037	-.039	-.030	-.017	-.021	-.006	-.020	1.017	-.006	-.020

*** STABILITY PARAMETER

* XI = .5799 *
* * *****

ORIGINAL PAGE IS
OF POOR QUALITY

OCWI PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 105 ALPHA-MCL = 6.0 PDP RUN-PT 22.07
RUN 22 ALPHA-BAR = .5 Q-COMP = .33289
POINT 3 ALPHA-SIGMA = -4.5 V-REF = .20236
COMPUTED FREQUENCY = 15.40, K = .1196

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661	
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	18.952	316.28	7.600	326.55	5.193	323.96	3.110	332.30
2	.966	157.07	.016	89.68	.086	134.50	.078	157.40
3	.379	155.24	.017	249.61	.042	264.42	.008	150.78
4	.069	135.88	.034	273.33	.048	286.19	.009	129.98
5	.157	125.66	.065	270.52	.038	289.14	.020	129.33
6	.120	106.30	.043	83.20	.028	84.41	.028	129.66
7	.088	312.79	.040	312.92	.016	335.27	.027	12.58
8	.049	152.26	.023	216.17	.030	241.69	.029	267.59
9	.022	322.78	.009	327.17	.014	352.76	.011	357.81
10	.037	16.38	.026	34.79	.009	355.04	.017	123.48

X =	.774	.860	.910	.910
N	DELCPM	PHI	DELCPM	PHI
1	1.445	58.82	1.107	47.81
2	.060	289.61	.013	314.96
3	.027	343.63	.054	124.38
4	.008	219.13	.037	212.81
5	.020	169.34	.022	181.89
6	.022	109.34	.003	28.76
7	.012	112.23	.013	279.76
8	.006	303.68	.013	282.84
9	.008	88.43	.009	326.27
10	.308	20.96	.010	78.46

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.861	278.91	3.942	334.24	11.019	157.00	1.442	214.77	7.650	97.64
2	.379	160.68	.137	200.99	.716	138.60	.395	166.19	.644	199.60
3	.571	154.43	.714	182.38	.611	158.60	.514	159.36	.475	18.70
4	.222	110.40	.253	112.96	.178	170.82	.175	102.45	.087	209.51
5	.106	163.13	.092	157.68	.180	147.00	.069	173.09	.132	283.84
6	.033	46.91	.153	1.60	.087	339.55	.037	298.94	.120	268.54
7	.037	175.90	.021	241.28	.089	228.14	.045	210.63	.090	124.26
8	.077	52.59	.078	102.81	.128	278.04	.094	89.38	.090	185.32
9	.039	191.03	.068	229.83	.069	189.04	.037	182.70	.021	136.74
10	.025	305.49	.055	352.60	.050	280.48	.027	309.01		

*** STABILITY PARAMETER

* XI = .5799
*
*

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 107 ALPHA-MCL = 6.0 PDP RUN-PT 22.09
RUN 22 ALPHA-PAR = .5 O-COMP = .33116
POINT 5 SIGMA = -.45 V-REF = .20182
COMPUTED FREQUENCY = 19.04, K = .1482
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	8	.996	.112	.588	.245	.378	.322	.565	.143	.298	.963
2	8	.578	.353	.026	.299	.151	.329	.114	.281	.116	.287
3	8	.235	.100	.030	.036	.060	.056	.050	.033	.049	.023
4	8	.041	.097	.008	.089	.028	.076	.016	.073	.031	.081
5	8	.020	.083	.025	.037	.019	.026	.009	.038	.000	.032
6	8	.015	.120	.017	.079	.024	.074	.016	.037	.023	.070
7	8	.009	.037	.009	.043	.011	.043	.006	.044	.010	.045
8	8	.044	.027	.045	.046	.036	.039	.034	.046	.008	.010
9	8	.013	.006	.005	.003	.002	.000	.006	.004	.001	.002
10	8	.022	.001	.036	.022	.037	.021	.039	.023	.041	.023

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	8	.496	.1699	.281	.137	.234	.1282	.361	.088	.484	.132
2	8	.063	.235	.030	.256	.082	.257	.022	.261	.053	.137
3	8	.071	.073	.067	.017	.074	.018	.055	.051	.074	.023
4	8	.004	.073	.002	.069	.034	.049	.000	.062	.005	.065
5	8	.001	.018	.007	.027	.007	.025	.004	.029	.005	.018
6	8	.004	.046	.010	.063	.010	.048	.001	.034	.019	.054
7	8	.008	.038	.004	.031	.004	.027	.001	.041	.003	.041
8	8	.032	.050	.035	.048	.035	.045	.029	.041	.030	.043
9	8	.012	.007	.014	.001	.013	.004	.021	.005	.014	.004
10	8	.046	.026	.054	.027	.048	.027	.050	.034	.056	.037

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	8	.368	.943	.667	.846	.652	.709	.863	.370	.165	.507
2	8	.066	.264	.079	.324	.072	.279	.085	.349	.055	.237
3	8	.027	.046	.039	.046	.025	.045	.050	.047	.028	.029
4	8	.003	.023	.003	.022	.003	.022	.014	.036	.009	.030
5	8	.012	.057	.014	.065	.011	.052	.009	.052	.004	.068
6	8	.004	.037	.005	.049	.005	.036	.004	.026	.004	.031
7	8	.022	.035	.035	.043	.012	.042	.012	.044	.023	.040
8	8	.009	.006	.011	.006	.012	.004	.012	.004	.011	.001
9	8	.048	.022	.062	.023	.054	.025	.054	.025	.041	.021
10	8	.048	.022	.062	.023	.054	.025	.054	.025	.041	.021

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 107 ALPHA-MCL = 6.0 PDP RUN.PT 22.09
 RUN 22 ALPHA-BAR = .5 Q-COMP = .33116
 POINT 5 SIGMA = -.45 V-REF = 201.82
 COMPUTED FREQUENCY = 19.04, K = .1482
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
		.012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
1	12	114	137.96	5.023	155.98	3.476	166.33	2.569	183.18	2.491	202.74	2.592	216.68	2.523	226.00
2	3	677	328.59	.300	274.93	.361	294.62	.304	292.13	.309	291.97	.276	290.60	.259	289.81
3	3	.255	202.98	.046	50.17	.082	42.75	.060	34.05	.054	24.59	.058	6.23	.064	4.98
4	5	.106	67.06	.089	95.14	.081	110.22	.075	102.15	.072	111.00	.075	114.55	.084	109.39
5	4	.086	76.31	.084	55.93	.032	54.01	.040	76.45	.032	90.31	.035	115.97	.014	186.77
6	7	.121	275.93	.080	292.06	.078	287.69	.078	281.84	.074	288.01	.071	291.06	.058	286.70
7	8	.039	275.99	.044	277.81	.045	275.99	.044	82.41	.046	102.72	.041	105.81	.031	88.05
8	8	.051	211.60	.064	225.69	.053	226.95	.057	233.71	.062	236.10	.054	242.85	.064	244.94
9	10	.015	334.36	.005	31.13	.002	177.74	.007	147.68	.013	126.67	.008	113.98	.011	159.39
10	10	.022	356.23	.042	329.00	.043	329.89	.045	330.21	.047	330.36	.046	327.19	.053	330.94

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
		.774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.148-LOWER		.261-LOWER	
1	2	264	228.65	2.001	230.19	1.779	226.09	6.015	303.97	2.598	304.84	2.140	284.23	1.476	268.15
2	3	.245	286.74	.268	287.30	.270	287.68	.261	265.25	.331	279.27	.306	284.58	.298	287.35
3	4	.085	121.17	.065	148.42	.078	134.65	.075	42.57	.074	17.47	.076	29.17	.074	28.75
4	5	.088	193.31	.081	123.42	.059	124.65	.062	89.75	.078	118.48	.068	114.40	.060	121.75
5	6	.048	287.00	.027	287.19	.029	281.18	.029	97.32	.019	75.37	.021	281.23	.027	290.53
6	7	.039	107.35	.066	287.69	.029	281.18	.027	294.23	.057	282.97	.058	281.23	.044	298.58
7	8	.059	237.47	.031	284.81	.028	81.97	.027	87.73	.041	85.51	.044	97.70	.043	110.27
8	9	.014	151.22	.065	227.88	.057	232.21	.050	235.12	.048	230.63	.052	235.28	.057	252.17
10	10	.053	330.69	.014	177.60	.013	161.00	.022	194.10	.014	198.35	.033	333.79	.021	212.81
				.061	333.40	.055	330.49	.061	325.64	.067	326.99	.072	333.79	.079	347.61

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
		.392-LOWER		.530-LOWER		.661-LOWER		.774-LOWER		.860-LOWER		.910-LOWER			
1	1	012	248.68	1.077	231.76	.963	227.37	.939	203.20	1.270	203.51	.837	236.38		
2	3	.271	283.18	.337	286.07	.288	284.40	.360	283.83	.244	283.07	.316	286.71		
3	4	.053	120.55	.061	130.31	.081	122.07	.101	22.47	.083	20.21	.084	10.00		
4	5	.058	282.84	.026	175.86	.048	96.94	.069	136.82	.058	116.51	.066	138.77		
5	6	.058	281.75	.026	282.73	.022	280.17	.039	169.11	.036	58.36	.040	183.76		
6	7	.037	295.69	.048	105.73	.037	97.97	.053	282.31	.070	281.98	.058	275.76		
7	8	.048	227.67	.062	203.10	.057	230.95	.028	113.86	.031	97.59	.053	102.02		
8	9	.011	335.49	.015	203.01	.055	196.92	.050	211.61	.046	184.77	.057	171.99		
10	10			.066	339.62	.012	337.09	.059	335.27	.011	333.24	.043	333.73		

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 107 ALPHA-MCL = 6.0 POP RUN.PI 22.09
RUN 22 ALPHA-RA = 5.5 Q-COMP = .33116
POINT 5 SIGMA = -4.5 V-REF = 201.82
COMPUTED FREQUENCY = 19.04, K = .1432

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.561
N	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	12.358	-13.101	6.072	-4.177	3.904	-2.896	2.517
2	-.600	.072	.028	-.028	-.032	-.032	-.025
3	.290	.150	.045	-.012	.006	-.019	.016
4	-.024	-.035	-.027	.024	-.020	.005	-.013
5	-.024	-.054	-.020	.019	-.005	.019	.013
6	.000	.087	.002	.024	-.017	.004	-.021
7	-.004	-.011	.015	-.002	.006	-.004	.016
8	.015	.014	-.018	.007	-.011	.004	-.012
9	-.034	-.033	.020	-.015	.028	-.010	.038
10	.028	-.033	.020	-.015	.028	-.010	.038

X =	.774	.460	.910	.125	.500	.125	.500
N	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI	DELCP DELCPI
1	.633	1.330	.770	.585	2.236	-.672	-.672
2	.018	.014	.009	-.046	-.036	-.021	-.016
3	.022	.005	.007	-.003	.023	.016	.025
4	-.006	.026	.016	.003	.006	.006	.006
5	.015	.018	.003	.013	.001	.011	.011
6	.003	.006	.005	.001	.001	.001	.001
7	-.004	.012	.007	.005	.007	.007	.007
8	-.010	.024	.003	.001	.002	.002	.002
9	.000	.002	.003	.002	.007	.008	.008
10	.006	.001	.006	.009	.014	.000	.000

*** STABILITY PARAMETER

* * * XI = .5673 *
* * * *****

WALL NO.	W1	W2	W4	W6	W10	W125
GAP FRACTION	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL
1	1	-1.185	-1.521	1.804	-1.360	-10.924
2	2	.170	-.438	.500	-.737	-.737
3	3	.075	.077	.094	.031	.031
4	4	.034	.083	.077	.043	.043
5	5	.031	.057	.077	.043	.043
6	6	.015	-.096	.001	.017	.017
7	7	.006	.058	.001	.017	.017
8	8	.049	.048	.026	.017	.017
9	9	.010	.003	.031	.017	.017
10	10	.079	-.039	.106	-.040	-.040

ORIGINAL FILE IS
OF POOR QUALITY

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 107 ALPHA-MCL = 6.0 POP RUN.PI 22.09
RUN 22 ALPHA-BAR = 45.5 Q-COMP = 33116
POINT S SIGMA = -45.5 V-REF = 201.82
COMPUTED FREQUENCY = 19.04, K = .1482

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	18.609	313.33	7.370	325.48	4.861	323.43	2.848	332.11	1.930	156.79
2	.607	171.24	.039	314.47	.080	288.65	.026	187.75	.059	156.79
3	.327	27.38	.046	344.67	.020	268.20	.016	231.07	.019	330.38
4	.059	220.82	.036	222.52	.013	195.12	.015	231.07	.036	276.67
5	.087	246.12	.028	222.95	.021	123.36	.026	188.37	.009	290.25
6	.013	232.15	.007	85.62	.023	123.36	.026	188.37	.017	129.28
7	.021	316.69	.007	199.71	.017	123.36	.018	188.37	.010	105.01
8	.034	310.84	.020	201.89	.008	324.99	.019	232.10	.016	81.77
9	.043	310.84	.025	323.58	.030	339.39	.038	332.56	.017	265.04
10									.008	8.06

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.473	64.55	1.037	83.58	.967	37.21	2.335	343.28	2.335	343.28
2	.115	278.86	.031	142.55	.047	281.07	.028	210.28	.041	210.28
3	.026	256.33	.025	320.00	.017	198.35	.028	257.51	.028	257.51
4	.023	50.91	.017	11.05	.014	248.71	.006	263.60	.006	263.60
5	.007	251.54	.007	218.81	.005	196.85	.012	188.93	.012	188.93
6	.012	251.42	.007	181.08	.012	156.58	.007	169.32	.007	169.32
7	.026	113.42	.022	21.37	.001	279.73	.021	69.32	.021	69.32
8	.002	276.35	.003	332.50	.004	213.93	.014	231.08	.014	231.08
9	.008	7.50	.014	153.90	.012	138.95	.014	231.08	.014	231.08
10										

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.928	232.08	2.259	323.00	11.840	157.31	2.591	194.56	7.242	107.99
2	.470	291.21	.890	304.12	.080	36.12	.358	289.88	.732	240.49
3	.107	45.61	.099	18.27	.155	354.84	.052	34.07	.484	25.88
4	.089	112.18	.078	248.68	.142	39.84	.082	108.25	.135	273.12
5	.064	61.48	.088	257.34	.091	99.85	.051	62.88	.205	15.01
6	.087	279.18	.075	257.24	.117	270.74	.067	295.71	.210	245.17
7	.058	282.80	.151	290.76	.083	276.15	.067	295.71	.101	230.06
8	.066	225.93	.076	249.76	.091	248.18	.076	249.76	.157	250.06
9	.011	161.98	.033	18.39	.014	68.82	.009	76.86	.026	224.20
10	.080	331.21	.113	339.29	.074	324.68	.063	336.12	.098	325.12

*** STABILITY PARAMETER

* XI = .5673
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MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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90 ALPHA-WCL = 6.0      PDP RUN-PT 20.04
20 ALPHA-BAR = .5      Q-COMP = 32345
POINT 1 SIGMA = 0.      V-REF = 99.44
COMPUTED FREQUENCY = 9.09, K = .0716

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***
COMPUTED

X N	.012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
-8	.653	2.133	-2.905	.963	-1.570	.537	-1.498	.293	-1.207	.106	.825	1.226	.139	
-7	.154	-.032	-1.509	-.476	-1.058	-.437	-1.105	-.536	-.249	-.592	-1.314	-1.285	-.652	
-6	.268	-.016	-.329	.135	-.628	-.135	-.628	-.106	-.707	-.372	-.117	-1.740	-.108	
-5	.329	-.005	-.008	.264	-.598	-.301	-.571	-.345	-.592	-.048	-.390	-.583	-.371	
-4	.021	-.011	.003	.082	-.039	-.096	-.061	-.074	-.046	-.079	-.079	-.043	-.065	
-3	.049	-.036	.000	.107	-.053	-.108	-.085	-.163	-.083	-.096	-.105	.095	.008	
-2	.062	-.018	.009	.105	-.078	-.108	-.078	-.104	-.083	-.007	-.091	.083	-.008	
-1	.035	-.018	.077	.031	-.047	-.030	-.060	-.041	-.032	-.019	-.042	.039	-.081	
0	.017	-.036	-.029	-.011	-.020	-.005	-.020	-.021	-.032	-.019	-.042	.035	-.051	
1	.042	-.076	-.061	.007	-.054	-.011	-.066	-.028	-.069	-.033	-.043	-.064	-.051	

[illegible]

X =	392-LOWER CPREAL CPIIMAG	530-LOWER CPREAL CPIIMAG	661-LOWER CPREAL CPIIMAG	774-LOWER CPREAL CPIIMAG	860-LOWER CPREAL CPIIMAG	910-LOWER CPREAL CPIIMAG
1	1.454	1.627	1.411	1.307	1.233	1.217
2	-1.102	-1.344	-1.177	-1.279	-1.192	-1.200
3	-1.107	1.777	1.137	1.743	1.668	1.716
4	1.333	1.444	1.257	1.358	1.599	1.547
5	1.519	1.405	1.244	1.366	1.599	1.547
6	1.050	1.086	1.089	1.069	1.066	1.077
7	1.093	1.399	1.085	1.104	1.074	1.099
8	1.001	1.048	1.037	1.079	1.074	1.076
9	1.071	1.355	1.051	1.013	1.050	1.043
10	1.013	1.343	1.046	1.046	1.027	1.043
11	1.013	1.353	1.061	1.065	1.052	1.050
12	1.013	1.353	1.061	1.065	1.052	1.050

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 90 ALPHA-MCL = 6.0 PCP RUN-PI 20.04
 RUN 20 ALPHA-PAP = 5 G-CMP = .32345
 POINT 1 CIRCMA = 0. V-REF = 199.44
 COMPUTED FREQUENCY = 9.09, K = .0716

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	9.912	166.15	1.658	161.25	1.577	149.54	1.544	23.12	1.825	559.53	1.234	352.54
2	2	1.157	168.21	1.148	161.92	1.223	255.42	1.344	206.99	1.494	256.20	1.440	206.91
3	3	1.344	121.92	1.642	34.86	1.667	237.25	1.718	349.99	1.794	251.20	1.756	351.75
4	4	1.329	180.92	1.613	237.25	1.667	237.25	1.699	212.35	1.736	251.20	1.691	351.75
5	5	1.361	27.79	1.698	299.36	1.695	309.39	1.724	304.35	1.796	307.79	1.714	303.22
6	6	1.361	36.08	1.118	4.26	1.134	309.39	1.135	315.84	1.141	316.43	1.114	317.26
7	7	1.361	16.77	1.103	4.26	1.072	327.76	1.082	311.54	1.081	327.76	1.089	329.51
8	8	1.136	159.52	1.051	191.91	1.029	227.79	1.077	211.52	1.043	226.64	1.040	215.24
9	9	1.086	113.86	1.053	191.91	1.072	227.79	1.077	205.51	1.081	212.23	1.082	215.24
10	10												

X	N	.774-UPPER		.910-UPPER		.012-L-LOWER		.062-L-LOWER		.148-L-LOWER		.261-L-LOWER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	1.368	355.92	1.390	128.12	5.490	346.93	2.629	3.57	2.359	357.66	1.899	1.34
2	2	1.426	355.92	1.753	237.49	1.732	347.85	1.706	351.17	1.698	357.66	1.704	207.62
3	3	1.729	213.82	1.671	213.46	1.675	210.25	1.706	213.38	1.623	357.66	1.670	349.62
4	4	1.681	308.59	1.129	213.46	1.199	210.25	1.158	306.66	1.099	213.38	1.106	214.97
5	5	1.126	318.23	1.101	213.46	1.088	210.25	1.158	306.66	1.138	213.38	1.130	304.58
6	6	1.022	359.64	1.077	352.95	1.059	1.78	1.495	355.54	1.066	306.66	1.078	312.63
7	7	1.022	359.64	1.077	352.95	1.059	1.78	1.495	355.54	1.066	306.66	1.078	312.63
8	8	1.022	359.64	1.077	352.95	1.059	1.78	1.495	355.54	1.066	306.66	1.078	312.63
9	9	1.022	359.64	1.077	352.95	1.059	1.78	1.495	355.54	1.066	306.66	1.078	312.63
10	10												

X	N	.392-L-LOWER		.530-L-LOWER		.661-L-LOWER		.860-L-LOWER		.910-L-LOWER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	1.451	5.33	1.648	9.25	1.424	7.85	1.440	6.17	1.267	16.25
2	2	1.252	208.56	1.540	237.49	1.424	7.85	1.440	6.17	1.267	16.25
3	3	1.617	213.82	1.740	213.46	1.424	7.85	1.440	6.17	1.267	16.25
4	4	1.092	309.49	1.104	213.46	1.424	7.85	1.440	6.17	1.267	16.25
5	5	1.121	309.49	1.104	213.46	1.424	7.85	1.440	6.17	1.267	16.25
6	6	1.074	358.11	1.078	352.95	1.424	7.85	1.440	6.17	1.267	16.25
7	7	1.074	358.11	1.078	352.95	1.424	7.85	1.440	6.17	1.267	16.25
8	8	1.074	358.11	1.078	352.95	1.424	7.85	1.440	6.17	1.267	16.25
9	9	1.074	358.11	1.078	352.95	1.424	7.85	1.440	6.17	1.267	16.25
10	10										

MODE 1 -- 13000
CENTER BLANK TEST
PERIODICITY TEST
STATS 7744, 7744
STATIONS 1500

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FILE=
RUN,
PCOUNT
ALPHAFREQ = 6.0
ALPHASBP = 3
SIGMA = 0
COMPUTED FREQUENCY = 9.09,
PSP RUN.PT = 29.74
C-COMP = 199.84
V-DEF = .0716

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FOURIER COEFFICIENTS, REAL & IMAGINARY PARTS

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

[illegible][illegible]

*** ALL PRESS-ES, SEE PAGE ***

WALL NO. SAP SECTION	W1 CPPEAL CPIMAG	W2 CPPEAL CPIMAG	W4 CPPEAL CPIMAG	W6 CPPEAL CPIMAG	W10 CPPEAL CPIMAG	* XI = *****	* *****
1	1.182	4.216	-9.440	1.472	-4.736	1.329	
2	-1.152	-1.706	-1.777	-1.523	-1.721	-0.947	
3	-0.850	-1.353	-1.873	-1.740	-1.707	-0.947	
4	-0.551	-1.026	-1.206	-1.438	-1.562	-0.339	
5	-0.377	-0.588	-1.137	-1.151	-0.881	-0.262	
6	-0.242	-0.369	-1.052	-0.976	-0.552	-0.065	
7	-0.154	-0.243	-0.914	-0.872	-0.277	-0.115	
8	-0.091	-0.143	-0.829	-0.780	-0.208	-0.033	
9	-0.053	-0.091	-0.722	-0.639	-0.064	-0.033	
10	-0.033	-0.051	-0.619	-0.519			

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 90 ALPHA-MCL = 6.0 POP RUN-PT 20.04
 RUN 20 ALPHA-BAR = .5 Q-COMP = .32345
 POINT 1 SIGMA = 0. V-REF = 199.44
 I COMPUTED FREQUENCY = 9.09, K = .0716

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
		.012		.062		.148		.261		.392	
1	14	.001	346.45	5.586	351.78	3.988	350.91	2.406	354.08	1.206	359.19
2	1	.212	210.80	.207	229.65	.211	227.20	.166	223.26	.105	219.19
3	4	.458	7.58	.103	15.30	.059	10.01	.067	341.98	.069	165.01
4	4	.421	232.76	.125	278.55	.075	288.97	.044	299.70	.083	28.06
5	5	.085	296.47	.022	223.23	.007	211.71	.014	267.42	.008	287.30
6	9	.224	274.54	.036	270.43	.021	321.46	.008	68.54	.018	171.11
7	6	.016	258.36	.018	258.81	.020	210.66	.006	96.22	.012	220.63
8	9	.215	207.71	.079	232.17	.041	241.26	.031	228.62	.021	243.81
9	9	.024	218.43	.007	216.60	.013	216.05	.016	170.17	.007	114.87
10	10	.180	266.09	.063	277.33	.033	296.39	.023	323.66	.028	5.73

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
		.774		.860		.910					
1	1	.377	98.84	.277	132.17	.436	113.35	1.773	357.23	1.090	243.99
2	3	.072	253.85	.111	144.96	.071	132.04	.090	243.99	.019	355.81
3	4	.044	298.55	.061	182.08	.049	122.85	.019	355.81	.014	313.97
4	5	.034	137.16	.073	127.56	.037	144.74	.014	313.97	.011	258.71
5	6	.023	323.03	.019	142.56	.018	26.82	.005	145.56	.022	236.23
6	7	.021	286.44	.015	267.71	.014	123.30	.006	141.11	.006	141.11
7	8	.014	103.31	.019	141.35	.002	94.73	.006	141.11	.006	141.11
8	9	.014	269.66	.010	130.77	.020	76.55	.006	141.11	.006	141.11
9	9	.002	22.17	.017	350.85	.009	102.10	.006	141.11	.006	141.11
10	10	.017	82.17	.020	55.81	.025	51.02	.014	141.11	.006	141.11

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	W1 CP-MAG	W1 PHI	W2 CP-MAG	W2 PHI	W3 CP-MAG	W3 PHI	W4 CP-MAG	W4 PHI	W5 CP-MAG	W5 PHI	W6 CP-MAG	W6 PHI	W7 CP-MAG	W7 PHI	W8 CP-MAG	W8 PHI	W9 CP-MAG	W9 PHI	W10 CP-MAG	W10 PHI
1	1	1	1.192	4.65	4.233	354.78	9.554	171.14	3.05	27.07	4.919	164.37	1.627	206.39	1.426	210.37	1.604	210.37	1.604	210.37	1.604	210.37
2	3	1	.771	206.67	2.023	212.49	1.853	196.39	1.627	206.39	1.426	210.37	1.604	210.37	1.604	210.37	1.604	210.37	1.604	210.37	1.604	210.37
3	4	1	.861	350.41	.869	349.08	.874	2.62	.826	349.35	.709	210.37	.656	211.06	.656	211.06	.656	211.06	.656	211.06	.656	211.06
4	5	1	.066	298.79	1.123	204.08	.818	189.00	.843	213.13	.297	345.13	.297	345.13	.297	345.13	.297	345.13	.297	345.13	.297	345.13
5	6	1	.192	292.32	.008	344.84	.170	323.63	.098	304.15	.268	282.46	.268	282.46	.268	282.46	.268	282.46	.268	282.46	.268	282.46
6	7	1	.082	4.10	.117	229.12	.235	318.24	.190	308.95	.220	282.46	.220	282.46	.220	282.46	.220	282.46	.220	282.46	.220	282.46
7	8	1	.085	320.32	.062	353.09	.179	335.06	.103	356.97	.220	282.46	.220	282.46	.220	282.46	.220	282.46	.220	282.46	.220	282.46
8	9	1	.082	229.94	.240	353.09	.168	335.06	.080	330.87	.118	282.46	.118	282.46	.118	282.46	.118	282.46	.118	282.46	.118	282.46
9	10	1	.104	210.96	.133	189.72	.040	195.03	.072	212.03	.234	210.96	.234	210.96	.234	210.96	.234	210.96	.234	210.96	.234	210.96

*** STABILITY PARAMETER

* XI = .1414 *
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MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 92 ALPHA-MCL = 6.0 PDP RUN-PT 20.06
RUN 20 ALPHA-BAP = .5 Q-COMP = .32019
POINT 3 ALPHA-SIGMA = 0. V-REF = 198.41
FOURIER COEFFICIENTS, REAL & IMAGINARY
COMPUTED FREQUENCY = 15.53, K = .1230
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	2	-8.546	1.885	-2.612	.062	-1.278	.360	-.215	.360	-.215	.360	-.215	.360	-.215	.360
2	3	-.003	-.035	-.276	.069	-.332	.324	-.267	.324	-.267	.324	-.267	.324	-.267	.324
3	4	.078	-.239	.069	.089	.089	.179	.066	.158	.066	.158	.066	.158	.066	.158
4	5	.075	.235	.284	.094	.261	.262	.282	.265	.282	.265	.282	.265	.282	.265
5	6	.112	.015	.094	.054	.072	.047	.048	.065	.048	.065	.048	.065	.048	.065
6	7	-.090	.016	-.054	.014	-.053	.034	-.055	.040	-.055	.040	-.055	.040	-.055	.040
7	8	-.006	.016	-.014	.037	-.015	.034	-.015	.034	-.015	.034	-.015	.034	-.015	.034
8	9	-.042	-.059	-.053	.003	-.028	.030	-.054	.024	-.054	.024	-.054	.024	-.054	.024
9	10	-.004	.043	-.022	.003	-.021	.000	-.012	.001	-.012	.001	-.012	.001	-.012	.001
10		.020	-.026	-.025	.025	-.026	.025	-.032	.032	-.032	.032	-.032	.032	-.032	.032

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	2	1.666	.287	1.731	.071	1.654	.446	5.351	.465	5.351	.465	5.351	.465	5.351	.465
2	3	-.317	-.414	-.324	.070	-.358	.443	-.342	.483	-.342	.483	-.342	.483	-.342	.483
3	4	.072	-.130	.071	.371	.053	.161	.112	.152	.112	.152	.112	.152	.112	.152
4	5	.346	.008	.371	.012	.375	.046	.319	.039	.319	.039	.319	.039	.319	.039
5	6	.009	.008	.012	.025	.000	.036	.052	.041	.052	.041	.052	.041	.052	.041
6	7	-.015	.005	-.025	.003	-.018	.044	-.000	.018	-.000	.018	-.000	.018	-.000	.018
7	8	.059	.014	.003	.003	.064	.012	.056	.009	.056	.009	.056	.009	.056	.009
8	9	.008	.000	.011	.031	.009	.008	.001	.028	.001	.028	.001	.028	.001	.028
9	10	-.035	-.030	-.031	.001	-.038	.025	-.021	.005	-.021	.005	-.021	.005	-.021	.005

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	2	1.614	.746	1.806	.071	1.555	.868	1.417	.044	1.417	.044	1.417	.044	1.417	.044
2	3	-.051	-.403	-.339	.078	-.310	.440	-.331	.468	-.331	.468	-.331	.468	-.331	.468
3	4	.323	.205	.378	.074	.345	.240	.436	.258	.436	.258	.436	.258	.436	.258
4	5	.009	.024	.014	.014	.005	.030	.027	.027	.027	.027	.027	.027	.027	.027
5	6	-.004	.016	-.013	.013	-.003	.033	-.019	.024	-.019	.024	-.019	.024	-.019	.024
6	7	.047	.015	.054	.007	.063	.013	.060	.004	.060	.004	.060	.004	.060	.004
7	8	.001	.019	.007	.007	.003	.018	.004	.004	.004	.004	.004	.004	.004	.004
8	9	.001	.027	.007	.007	.003	.018	.004	.004	.004	.004	.004	.004	.004	.004
9	10	.020	.027	.027	.027	.024	.028	.026	.036	.026	.036	.026	.036	.026	.036

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 92 ALPHA-MCL = 6.0 PDP RUN-PT 20.06
 RUN 20 ALPHA-BAR = .5 Q-COMP = .32019
 POINT 33 SIGMA = 0. V-REF = .18841
 COMPUTED FREQUENCY = 0.15.53, K = .1230

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	8	.751	167.56	2.791	159.35	1.427	153.58	.419	120.85	.563	25.39	1.161	6.61
2	3	.035	264.59	.509	237.16	.200	296.52	.475	235.89	.492	302.80	.532	302.46
3	4	.305	75.76	.389	42.10	.370	45.07	.361	39.62	.405	38.50	.158	30.20
4	5	.113	77.46	.111	32.23	.086	33.17	.081	53.47	.097	61.24	.402	74.20
5	6	.106	148.18	.077	138.23	.067	142.53	.065	147.79	.052	136.23	.038	155.12
6	7	.073	111.31	.064	237.93	.037	207.32	.043	204.85	.055	206.72	.046	197.23
7	8	.043	95.87	.023	171.27	.021	180.26	.059	204.32	.065	206.72	.063	189.63
8	9	.033	308.28	.035	225.69	.036	224.11	.045	224.13	.048	228.74	.053	215.90

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	.690	9.79	1.778	13.22	1.713	15.08	.371	355.04	.365	13.01	2.606	9.45
2	2	.521	232.16	.153	237.44	.169	288.39	.124	234.57	.515	238.16	.510	234.60
3	3	.413	33.05	.445	33.33	.435	30.35	.354	325.48	.374	28.42	.163	306.24
4	4	.069	82.55	.065	79.72	.046	85.24	.065	26.73	.024	44.21	.084	47.54
5	5	.041	111.20	.039	121.41	.038	89.25	.041	90.35	.024	96.16	.022	112.47
6	6	.046	259.98	.043	263.45	.048	247.74	.018	271.80	.032	265.43	.032	261.34
7	7	.051	192.98	.065	195.91	.065	190.24	.057	188.71	.053	198.86	.052	265.82
8	8	.013	232.18	.012	223.01	.012	223.41	.028	268.08	.023	243.56	.027	268.98
9	9	.046	220.53	.045	213.41	.045	213.41	.022	192.89	.029	213.17	.027	228.98

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	.778	24.82	2.073	29.37	1.780	29.17	1.760	36.39	1.506	29.70	1.770	37.43
2	2	.485	236.11	.601	235.79	.539	234.84	.574	234.71	.556	237.19	.566	234.91
3	3	.383	292.07	.483	293.79	.421	294.63	.506	289.46	.420	294.25	.420	288.75
4	4	.072	53.01	.090	57.55	.067	52.33	.077	69.22	.057	65.09	.055	52.52
5	5	.026	109.57	.034	114.87	.033	115.90	.028	109.00	.014	140.38	.037	92.86
6	6	.032	268.79	.039	250.44	.034	255.23	.053	248.93	.055	262.38	.058	249.30
7	7	.050	198.63	.058	201.81	.054	193.49	.064	202.27	.055	199.45	.058	189.33
8	8	.019	266.41	.024	288.14	.018	260.50	.014	285.10	.019	304.40	.013	295.33
9	9	.033	233.41	.039	233.24	.037	229.20	.045	233.59	.042	223.59	.042	219.14

ORIGINAL PAGE IS
 OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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92 ALPHA-MCL = 6.0 PDP RUN.PT 20.06
20 ALPHA-RAP = .5 Q-COMP = .32019
3 SIGMA = 0. V-REF = 198.41
COMPUTED FREQUENCY = 15.53, K = .1230

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FOURIER COEFFICIENTS, REAL & IMAGINARY
 *** BLADE PRESSURES, NORMAL FORCE, AND
 MOMENT, PER RADIAN ***
 COMPUTED FREQUENCY = 15.53, K

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	X = .012		.062		.148		.261		.392		.530		.661	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	13	397	-2	350	5	594	3	849	2	311	1	109	1	496
2	339	448	-	494	594	004	-	064	207	025	035	010	046	
3	034	166	-	102	029	007	007	048	027	031	019	037	077	
4	044	143	-	088	055	007	048	055	036	024	051	046	043	
5	061	024	-	002	035	015	015	015	030	016	006	022	016	
6	090	016	-	024	052	015	015	043	030	005	004	038	015	
7	034	034	-	009	012	011	011	013	019	013	004	004	004	
8	013	050	-	020	002	009	009	009	011	013	003	006	008	
9	043	070	-	024	012	020	020	014	008	008	003	008	011	
10	042	021	-	000	000	000	008	021	001	002	000	016	001	

[illegible]

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*** STABILITY PARAMETER ***  
      * XI = .1036 *  
      *          *
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*** WALL PRESSURES, PER RADIAN ***										
WALL NO. GAP FRACTION	W1 -.125		W2 -.000		W4 -.125		W6 -.500		W10 1.125	
	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1.430	.581	4.010	-.057	-9.102	1.532	.510	.354	-5.210	1.161
2	-.409	-.469	-.426	-.676	-.039	-.354	-.391	-.497	-.318	-.503
3	1.154	.181	.245	-.162	.463	-.105	.079	-.285	.391	-.033
4	1.368	.309	.277	-.076	.202	.559	.334	.086	.391	.038
5	1.106	.342	.104	-.076	.141	.010	.060	.043	.290	.148
6	-.014	.020	-.121	.047	-.023	.006	-.010	.046	-.057	-.088
7	-.020	-.026	-.096	-.081	.051	-.045	.067	.038	-.035	.107
8	-.049	-.044	.132	-.048	.012	.015	.066	-.018	-.019	-.040
9	-.033	.005	-.014	-.052	-.026	-.076	-.027	-.038	.019	-.005
10	-.003	-.018	.014	-.052	-.026	-.076	-.027	-.038	.019	-.005

*** WALL PRESSURES. PER RADIANT ***

WALL NO.
GAP FRACTION

521
-0.125

000
24

W4
•125

005.
W6

1.125
W10

***IX**

• 1036 •

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 92 ALPHA-MCL = 6.0 PDP RUN-PT 20.06
RUN 20 ALPHA-BAR = .5 O-COMP = .32019
POINT 3 SIGMA = 0. V-REF = .198.41
COMPUTED FREQUENCY = 15.53, K = .1230
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
		.012	.062	.148	.261	.392	.530	.661							
1	14	.094	350.40	5.605	356.99	3.855	356.92	2.333	7.89	1.215	24.11	1.078	53.50	.685	93.86
2	14	.062	232.87	.011	274.06	.112	235.31	.043	234.99	.020	345.05	.044	262.22	.023	97.59
3	189	.329	329.53	.099	297.39	.082	317.74	.041	49.64	.061	147.54	.023	260.96	.036	267.12
4	.283	158.35	.035	182.96	.021	135.63	.026	.016	66.65	.028	262.82	.027	59.82	.036	89.58
5	.092	350.18	.057	334.74	.047	337.72	.046	.016	111.14	.033	277.34	.025	324.46	.007	329.59
6	.034	281.23	.015	323.92	.011	12.26	.014	.016	339.49	.020	336.40	.009	26.89	.016	276.77
7	.052	105.46	.020	53.02	.016	53.83	.018	.016	305.37	.017	50.83	.007	331.90	.014	56.87
8	.071	272.83	.027	295.92	.030	331.48	.024	.016	305.37	.008	283.04	.030	331.44	.014	322.87
9	.047	153.37	.009	87.78	.009	28.95	.021	.021	357.17	.015	38.50	.020	.009	.016	356.59

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	N	CN-MAG	PHIN	N	CN-MAG	PHIN
		.774		.860		.910							
1	1	.797	108.19	.542	141.27	.677	111.52	1	1.690	11.95	1	1.690	11.95
2	1	.056	255.21	.013	264.35	.039	340.46	2	.052	254.92	2	.052	254.92
3	3	.029	228.73	.026	197.96	.001	340.46	3	.015	101.20	3	.011	304.46
4	5	.095	20.10	.017	314.98	.034	145.51	4	.031	359.50	4	.031	304.46
5	4	.019	12.17	.026	291.16	.030	354.70	5	.007	318.29	5	.006	169.46
6	6	.012	296.20	.026	258.60	.011	100.24	6	.025	342.79	6	.001	333.70
7	7	.011	202.82	.012	258.60	.017	62.56	7	.006	38.99	7	.001	333.70
8	8	.011	268.65	.011	357.80	.007	13.83	8	.008	35.96	8	.002	269.43
9	9	.012	341.18	.022	344.93	.019	346.09	9	.019	312.15	9	.003	269.43
10	10	.010	325.73	.006	81.56	.005	340.14	10	.010	110.97	10	.001	110.97

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	W1 --.125 CP-MAG	PHI	W2 .000 CP-MAG	PHI	W4 .125 CP-MAG	PHI	W6 .500 CP-MAG	PHI	W10 1.125 CP-MAG	PHI	XI =	.1036
1	1	544	22.13	33	4	011	359.19	9.230	170.44	621	34.76	5.337	197.43	
2	2	622	228.83	33	799	337.79	397	206.38	632	231.84	755	226.70	226.70	
3	3	238	310.40	33	294	326.54	112	290.61	202	291.13	051	319.88	319.88	
4	4	481	40.03	33	473	54.19	726	50.32	439	40.47	790	79.64	79.64	
5	5	481	40.03	33	473	54.19	202	50.32	105	54.98	393	5.54	5.54	
6	6	025	21.85	33	128	323.80	180	141.79	076	145.73	325	152.97	152.97	
7	7	033	232.89	33	126	220.19	024	165.16	047	258.01	105	237.16	237.16	
8	8	099	206.57	33	140	199.86	066	219.68	073	210.74	113	251.98	251.98	
9	9	033	188.96	33	058	236.15	019	130.30	033	228.91	020	345.68	345.68	
10	10	020	241.98	33	054	284.74	081	251.00	050	228.91	020	345.68	345.68	

*** STABILITY PARAMETER

* XI = .1036 *

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 --- OCMI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 94 ALPHA-MCL = 6.0 POP RUN-PT 20.08
RUN 20 ALPHA-BAR = .5 Q-COMP = .32337
POINT 5 SIGMA = 0. V-REF = 190.41
COMPUTED FREQUENCY = 19.04, K = .1500

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	8	.839	1.128	1.210	1.345	1.476	1.607	1.738
2	3	.134	-.097	-.127	-.166	-.205	-.244	-.283
3	4	.185	-.051	-.083	-.117	-.152	-.187	-.221
4	5	.071	-.011	-.022	-.033	-.044	-.055	-.066
5	7	.090	-.011	-.022	-.033	-.044	-.055	-.066
6	9	.094	-.017	-.028	-.039	-.050	-.061	-.072
7	8	.008	-.022	-.033	-.044	-.055	-.066	-.077
8	9	.008	-.022	-.033	-.044	-.055	-.066	-.077
9	10	.006	-.015	-.026	-.037	-.048	-.059	-.070
10								
X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG
1	8	.943	1.362	1.529	1.696	1.863	2.030	2.197
2	3	.368	-.101	-.132	-.163	-.194	-.225	-.256
3	4	.020	-.019	-.020	-.021	-.022	-.023	-.024
4	5	.019	-.031	-.042	-.053	-.064	-.075	-.086
5	6	.036	-.050	-.061	-.072	-.083	-.094	-.105
6	7	.031	-.055	-.066	-.077	-.088	-.099	-.110
7	8	.026	-.055	-.066	-.077	-.088	-.099	-.110
8	9	.013	-.044	-.055	-.066	-.077	-.088	-.099
9	10	.013	-.044	-.055	-.066	-.077	-.088	-.099
10								
X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	8	.959	1.301	1.497	1.685	1.873	2.061	2.249
2	3	.338	-.118	-.149	-.180	-.211	-.242	-.273
3	4	.179	-.027	-.038	-.049	-.060	-.071	-.082
4	5	.022	-.008	-.019	-.030	-.041	-.052	-.063
5	6	.024	-.010	-.021	-.032	-.043	-.054	-.065
6	7	.041	-.023	-.034	-.045	-.056	-.067	-.078
7	8	.026	-.034	-.045	-.056	-.067	-.078	-.089
8	9	.026	-.034	-.045	-.056	-.067	-.078	-.089
9	10	.012	-.021	-.032	-.043	-.054	-.065	-.076
10								

ORIGINAL PAGE IS
OF POOR QUALITY.

MODE 1 -- CENTER BLADE DATA, WALL STATIONS
FILE 94 ALPHA-MCL = 6.0 POP RUN-PT 23.08
RUN 20 ALPHA-BAR = .5 Q-COMP = 3237
POINT 5 SIGMA = 0. V-REF = 199.41
COMPUTED FREQUENCY = 19.04, K = .1500
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	8	910	172.73	3	216	176.51	1	906	185.42	928	204.13	557	249.59
2	9	251	157.78	439	37.65	516	41.89	526	40.92	516	41.89	557	43.08
3	10	332.20	209	324.08	215	326.92	333.27	326	329.71	326	329.71	326	329.71
4	10	150.08	103	195.66	087	211.11	072	229.71	078	225.67	078	225.67	078
5	6	186.95	072	356.93	086	208.91	077	221.82	085	223.62	085	223.62	085
6	7	190.06	095	222.45	066	233.12	070	221.21	078	223.62	078	223.62	078
7	8	120.26	025	102.45	034	106.14	041	104.72	051	112.36	051	112.36	051
8	9	238.90	016	193.97	017	168.44	015	189.01	013	189.01	013	189.01	013
9	10	291.74	016	262.47	012	288.80	016	273.00	015	273.00	015	273.00	015

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	010	338.99	999	344.94	4	736	347.85	2	426	3.62	1	915
2	2	226	333.50	517	44.02	478	29.21	478	29.21	478	29.21	478	29.21
3	3	538	248.20	240	336.42	233	328.21	233	328.21	233	328.21	233	328.21
4	4	58.10	036	218.49	031	277.78	049	240.76	041	236.85	041	236.85	041
5	5	58.77	036	49.56	024	52.05	026	67.14	021	42.00	021	42.00	021
6	6	235.00	062	232.40	011	238.90	058	234.64	052	247.27	052	247.27	052
7	7	197.74	052	126.84	046	114.72	054	114.44	046	114.44	046	114.44	046
8	8	197.51	018	15.73	001	15.73	062	103.13	014	190.25	014	190.25	014
9	9	265.41	018	275.92	012	277.51	022	317.24	015	291.65	015	291.65	015

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	014	17.24	1	554	26.25	889	24.64	814	39.47	522	23.76	916
2	2	459	124.33	554	43.39	43	43.39	43	43.39	43	43.39	43	43.39
3	3	230	231.11	227	215.62	234	176.10	227	215.62	227	215.62	227	215.62
4	4	535	17.85	227	215.62	229	176.10	227	215.62	227	215.62	227	215.62
5	5	216.40	051	217.04	029	213.92	061	211.34	019	224.76	019	224.76	019
6	6	231.93	042	222.99	053	231.75	055	226.61	049	225.75	049	225.75	049
7	7	196.09	011	129.68	052	123.52	046	131.61	042	120.58	042	120.58	042
8	8	196.51	011	193.01	011	179.52	007	194.52	011	193.01	011	193.01	011
9	9	275.51	011	270.07	011	274.05	008	208.61	011	282.83	011	282.83	011


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FILE      94  ALPHA-MCL = 6.0  PDP RUN-PT  20.08
PUN-      50  ALPHA-CAR = .5  O-COMP = 32337
FCN-      25  SIGMA = 0.0  V-REF = 199.41
COMPUTED FREQUENCY = 19.04, K = .150U
IMAGINARY
REAL &

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND
CO-POLED

X =	.012		.062		.148		.261		.392		.530		.661							
	N	DELCPR	N	DELCPR	N	DELCPR	N	DELCPR	N	DELCPR	N	DELCPR	N	DELCPR						
1	13	.468	-2	.125	5	.628	-	.043	3	.512	-	.131	2	.269	1	.162	1	.596	1	.058
2	2	.291	-	.026	5	.071	-	.056	3	.008	-	.039	2	.014	1	.068	1	.034	1	.005
3	3	.013	-	.025	5	.032	-	.007	3	.007	-	.027	2	.007	1	.039	1	.033	1	.009
4	5	.061	-	.094	5	.027	-	.004	3	.043	-	.027	2	.028	1	.033	1	.024	1	.065
5	4	.066	-	.035	5	.027	-	.005	3	.017	-	.025	2	.022	1	.030	1	.012	1	.038
6	7	.061	-	.030	5	.047	-	.013	3	.039	-	.005	2	.023	1	.021	1	.011	1	.026
7	6	.086	-	.041	5	.028	-	.009	3	.009	-	.005	2	.015	1	.028	1	.009	1	.002
8	9	.002	-	.039	5	.028	-	.001	3	.009	-	.001	2	.030	1	.006	1	.021	1	.013
9	0	.010	-	.052	5	.033	-	.001	3	.012	-	.013	2	.001	1	.001	1	.010	1	.002
0	0	.001	-	.001	5	.007	-	.007	3	.005	-	.003	2	.002	1	.004	1	.008	1	.002

X	=		774		860		910		N	CNREAL		CNIMAG		N	CMREAL		CMIMAG	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP		DELCP	DELCP	DELCP	DELCP		DELCP	DELCP	DELCP	DELCP
1	315	879	486	470	142	679	1	630	55	1	613	55	1	613	55	1	613	55
2	317	875	486	468	142	679	2	630	55	2	613	55	2	613	55	2	613	55
3	317	875	486	468	142	679	3	630	55	3	613	55	3	613	55	3	613	55
4	317	875	486	468	142	679	4	630	55	4	613	55	4	613	55	4	613	55
5	317	875	486	468	142	679	5	630	55	5	613	55	5	613	55	5	613	55
6	317	875	486	468	142	679	6	630	55	6	613	55	6	613	55	6	613	55
7	317	875	486	468	142	679	7	630	55	7	613	55	7	613	55	7	613	55
8	317	875	486	468	142	679	8	630	55	8	613	55	8	613	55	8	613	55
9	317	875	486	468	142	679	9	630	55	9	613	55	9	613	55	9	613	55
10	317	875	486	468	142	679	10	630	55	10	613	55	10	613	55	10	613	55

*** STABILITY PARAMETER

*** WALL PRESSURES. PER RADIAN ***

WALL NO. GAP FRACTION	W1 --.125		W2 --.000		W4 --.125		W6 --.500		W10 --.125		* XI = .0812 *	*****
	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG		
1	.503	-.359	2.888	-1.039	-9.815	.353	-.321	-.523	-5.474	-.210		
2	.625	-.394	.647	-.029	.650	.163	.504	.435	.217	.670		
3	.281	-.184	.366	-.209	.183	-.182	.264	-.153	.179	.310		
4	-.045	-.066	-.144	-.096	.013	.063	-.069	-.077	-.072	.121		
5	.060	.017	.122	-.052	.061	.020	-.072	.021	.169	.017		
6	-.034	-.053	.085	-.097	-.092	-.098	-.076	-.069	-.097	.076		
7	.028	-.027	.027	-.033	-.052	.077	.041	-.074	-.010	-.105		
8	-.015	.032	-.040	.030	.007	.039	.023	.061	.017	.080		
9	.032	-.034	.034	.021	.021	-.001	.023	-.003	-.014	.022		
10	.036	-.012	.034	-.024	.027	-.001	.012	-.032	.022	-.028		

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 94 ALPHA-MCL = 6.0 PDP RUN-PT 20.08
RUN 20 ALPHA-BAR = .5 Q-COMP = 32337
POINT 5 SIGMA = 0. V-REF = 199.41
COMPUTED FREQUENCY = 19.04, K = .1500

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
X =	.012	.062	.148	.261	.392	.530	.661					
1	13.635	351.03	5.628	359.57	3.814	1.97	2.336	13.77	1.423	35.254	1.215	60.62
2	.029	297.80	.033	345.55	.028	283.70	.031	242.73	.039	181.29	.037	131.45
3	.115	304.94	.059	331.47	.044	352.81	.032	247.37	.044	41.50	.052	309.66
4	.070	150.30	.032	148.51	.032	132.66	.022	168.09	.042	223.43	.039	69.88
5	.068	333.74	.048	348.43	.040	6.66	.025	20.41	.035	54.255	.026	95.22
6	.039	93.35	.024	350.13	.012	41.30	.035	40.59	.037	40.59	.028	113.50
7	.039	93.35	.014	144.99	.021	178.58	.032	200.80	.014	242.76	.028	113.50
8	.011	193.08	.007	347.28	.018	313.92	.003	335.05	.002	311.69	.011	15.12
9	.010	3.04	.007	347.28	.005	330.06	.007	23.71	.005	330.48	.008	15.58
10												

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
X =	.774	.860	.910									
1	.934	109.70	.676	136.00	.693	101.83	1.722	18.80	1.016	237.96	.619	352.45
2	.009	144.98	.037	193.24	.032	136.80	.016	237.96	.024	266.00	.007	349.77
3	.062	282.53	.022	18.74	.047	103.12	.034	44.86	.016	216.70	.002	310.25
4	.026	58.33	.010	357.77	.004	34.71	.016	44.86	.016	216.70	.005	142.82
5	.024	129.84	.026	206.24	.002	196.75	.016	44.86	.016	216.70	.006	153.12
6	.027	105.86	.014	61.77	.008	122.77	.016	57.45	.016	214.58	.004	331.96
7	.011	245.92	.006	353.73	.008	293.25	.012	214.58	.004	358.67	.003	150.57
8	.016	42.90	.008	192.05	.004	279.08	.004	358.67	.004	358.67	.001	279.27
9	.015	111.12	.002	53.86	.008	175.14	.003	40.39	.003	40.39	.001	330.94
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*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	W1	W2	W4	W6	W10	PHI	CP-MAG	PHI
					.125	.000	.125	.500				
1	.617	324.50	3.070	340.21	9.822	177.94	.614	238.47	5.478	182.20		
2	.739	326.75	.648	1.51	.670	175.92	.666	40.79	.704	172.05		
3	.335	217.75	.421	330.23	.258	315.19	.305	329.88	.357	330.02		
4	.108	217.75	.173	213.62	.065	101.89	.104	228.05	.141	121.01		
5	.092	16.04	.133	336.93	.064	18.58	.105	16.04	.170	218.21		
6	.082	214.53	.129	228.69	.134	226.73	.103	22.22	.124	218.21		
7	.082	214.53	.043	230.06	.093	236.17	.085	241.23	.106	264.76		
8	.023	171.03	.050	133.41	.040	100.06	.063	117.57	.082	277.83		
9	.013	298.96	.032	139.21	.021	182.17	.034	189.79	.026	121.79		
10			.042	324.12	.058	297.90			.036	308.51		

ORIGINAL PAGE IS
OF POOR QUALITY

QCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 96 ALPHA-MCL = 6.0 PDP RUN-PT 21.054
RUN 21 ALPHA-RAD = .5 O-COMP = 32119
POINT 1 SIGMA = 45. V-REF = 198.71
COMPUTED FREQUENCY = 9.08, K = .0718
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	1	-13.756	-5.179	-6.429	-4.629	-1.01	-3.397	-1.113
2	2	-.674	-.869	-.657	-.815	1.028	1.028	1.028
3	3	-.146	-.344	-.127	-.160	-.472	-.472	-.472
4	4	-.093	-.367	-.297	-.297	-.238	-.238	-.238
5	5	-.038	-.233	-.324	-.401	-.358	-.358	-.358
6	6	-.118	-.123	-.072	-.136	-.074	-.074	-.074
7	7	-.031	-.069	-.077	-.172	-.145	-.145	-.145
8	8	-.001	-.027	-.030	-.010	-.083	-.083	-.083
9	9	-.037	-.031	-.035	-.046	-.047	-.047	-.047
10	10							

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	1	-1.725	-1.841	-1.697	-1.651	-4.837	-3.721	-2.842
2	2	-.748	1.237	1.781	1.261	-.966	1.044	1.209
3	3	-.201	-.139	-.552	-.949	-.531	-.832	-.875
4	4	-.354	-.327	-.317	-.289	-.174	-.147	-.178
5	5	-.367	-.327	-.336	-.341	-.245	-.295	-.295
6	6	-.049	-.176	-.027	-.189	-.035	-.411	-.377
7	7	-.071	-.158	-.095	-.158	-.128	-.200	-.190
8	8	-.037	-.035	-.064	-.049	-.090	-.035	-.141
9	9			-.039	-.047	-.024	-.036	-.032
10	10							

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	-.505	-.922	-.943	-1.544	-1.441	-1.813
2	2	-.651	-.812	-.711	-.733	-.733	-.721
3	3	-.479	-.582	-.512	-.549	-.504	-.515
4	4	-.185	-.222	-.201	-.211	-.213	-.223
5	5	-.323	-.365	-.342	-.353	-.324	-.338
6	6	-.070	-.046	-.033	-.033	-.029	-.041
7	7	-.059	-.044	-.038	-.070	-.087	-.113
8	8	-.028	-.034	-.034	-.074	-.057	-.059
9	9	-.027	-.035	-.033	-.059	-.063	-.039
10	10						

MODE 1 -- OCWI PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 96 ALPHA-MCL = 6.0 PDP RUN-PT 21.04
 RUN 21 ALPHA-PAR = 5.5 Q-COMP = 32119
 POINT 11 SIGMA = 45.0 V-REF = 198.71
 COMPUTED FREQUENCY = 9.08, K = .0718

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	14.689	200.63	6.470	186.51	4.631	181.32	3.431	171.91	2.191	159.09	2.748	146.74
2	1.100	127.82	1.220	57.41	1.244	60.10	1.284	60.10	1.411	60.06	1.476	59.37
3	.623	83.85	.948	59.29	.539	60.19	.961	60.55	1.030	60.89	1.081	60.27
4	.153	163.39	.248	210.80	.277	215.25	.236	210.82	.419	217.82	.249	215.81
5	.115	324.44	.394	323.03	.399	318.05	.400	323.39	.548	317.64	.559	318.50
6	.236	279.37	.538	307.10	.530	310.97	.524	311.10	.199	317.27	.189	313.53
7	.170	133.74	.203	110.81	.189	113.97	.179	115.58	.167	114.42	.191	113.59
8	.106	139.35	.142	172.40	.148	163.15	.159	165.83	.101	22.11	.131	27.11
9	.029	88.26	.085	20.48	.079	17.03	.087	17.03	.073	246.06	.081	248.58
10	.049	220.26	.063	236.83	.067	227.27	.071	228.09	.073	246.06	.081	248.58

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2.523	133.15	2.409	134.33	2.367	135.78	6.103	37.57	2.960	73.79	2.464	72.89
2	1.448	58.82	1.466	59.56	1.483	58.23	1.422	47.22	1.451	56.43	1.571	54.32
3	1.245	214.76	1.080	215.91	1.098	214.81	1.987	57.49	1.032	57.97	1.038	57.55
4	.491	318.32	.450	322.63	.457	319.36	.227	220.20	.254	224.50	.252	216.28
5	.491	318.32	.504	319.21	.479	314.57	.553	309.66	.423	315.89	.405	316.25
6	.183	105.54	.196	105.32	.191	98.05	.203	99.84	.194	102.76	.199	103.12
7	.177	63.42	.192	58.95	.184	59.07	.189	47.57	.188	48.92	.185	52.16
8	.090	37.58	.088	38.05	.081	37.39	.097	339.00	.111	6.92	.101	12.40
9	.068	236.84	.069	234.24	.061	230.21	.043	236.22	.046	224.00	.054	215.40

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1.697	107.32	2.043	116.81	1.769	122.21	2.069	138.24	1.921	138.59	2.178	146.37
2	1.266	58.55	1.548	58.38	1.358	58.41	1.502	60.80	1.414	58.78	1.302	58.05
3	.227	215.37	1.160	213.72	1.030	211.26	1.138	209.99	1.019	211.06	1.049	201.78
4	.389	319.31	.472	310.69	.427	319.68	.456	320.75	.219	318.44	.437	321.20
5	.453	315.58	.530	318.14	.474	316.07	.481	317.40	.467	315.95	.435	316.55
6	.186	99.32	.224	101.71	.201	99.72	.231	98.24	.215	97.83	.184	103.98
7	.082	19.74	.105	26.56	.197	60.01	.197	56.18	.182	61.37	.192	53.73
8	.054	210.67	.066	213.38	.086	210.06	.071	213.92	.071	218.93	.054	224.07

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 96 ALPHA-PCL = 6.0 PDP RUN-PT 21.04
PUN 21 ALPHA-PAR = .5 Q-COMP = .3219
POINT 1 SIGMA = 45. V-REF = 198.71
COMPUTED FREQUENCY = 9.03, K = .0718
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	.012		.064		.148		.261		.392		.530		.661	
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	20.613	25.58	6.082	26.23	5.891	24.64	3.703	25.39	2.354	13.58	1.440	11.79	1.078	338.43
2	1.649	6.08	.232	51.26	.086	27.00	.135	21.17	.149	256.83	.079	54.77	.121	241.30
3	.510	24.63	.037	43.42	.082	25.65	.064	42.14	.094	258.51	.051	186.58	.051	252.85
4	.192	302.75	.025	302.75	.025	24.68	.026	276.92	.027	187.23	.025	186.58	.047	156.90
5	.276	303.52	.059	259.41	.086	331.10	.015	242.43	.043	147.29	.053	147.95	.044	143.58
6	.376	303.64	.051	239.53	.051	61.47	.078	279.08	.097	147.29	.059	60.62	.030	255.98
7	.113	43.08	.031	358.94	.038	34.70	.019	54.82	.061	358.65	.038	30.40	.013	39.70
8	.220	12.74	.062	331.79	.044	16.76	.028	37.30	.020	212.00	.004	12.91	.016	249.62
9	.108	325.55	.025	331.98	.018	85.21	.016	41.16	.042	113.25	.048	120.60	.034	109.96
10	.014	340.12	.023	86.67	.018	85.21	.016	41.16	.042	113.25	.048	120.60	.034	109.96

X =	.774		.860		.910		N	CN-MAG		PHIN		N	CN-MAG		PHIM	
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI		DELCPM	PHI	DELCPM	PHI		DELCPM	PHI		
1	.497	291.46	.514	298.19	.460	255.29	1	2.830	18.98	.037	356.93	1	.899	28.47	.045	30.10
2	.076	101.81	.066	260.35	.121	240.23	2	.037	356.93	.017	16.62	2	.045	30.10	.007	261.75
3	.091	118.37	.029	80.28	.074	217.10	3	.017	347.92	.017	347.92	3	.007	261.75	.010	292.28
4	.019	267.16	.045	185.64	.036	88.50	4	.028	139.80	.034	39.52	4	.010	292.28	.004	7.94
5	.013	176.53	.058	186.71	.047	116.09	5	.034	39.52	.004	16.32	5	.004	7.94	.004	16.88
6	.054	72.86	.033	46.43	.017	215.38	6	.004	16.32	.004	330.41	6	.004	16.88	.004	349.49
7	.031	9.43	.013	201.89	.019	352.38	7	.024	110.50	.024	110.50	7	.004	349.49	.002	10.37
8	.004	326.41	.027	174.00	.021	121.38	8	.024	110.50	.024	110.50	8	.002	10.37	.002	10.37
9	.028	141.52	.023	167.06	.010	187.04	9	.024	110.50	.024	110.50	9	.002	10.37	.002	10.37
10							10					10				

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	.125		.000		.125		.500		.125		.500		.125		.500	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.673	131.52	.828	55.91	14.375	188.12	3.251	162.42	8.068	223.80	1.068	223.80	1.068	223.80	1.068	223.80
2	1.890	58.01	1.471	52.49	1.349	57.56	1.636	60.08	1.349	57.56	1.636	60.08	1.349	57.56	1.636	60.08
3	1.338	58.01	1.471	52.49	1.349	57.56	1.636	60.08	1.349	57.56	1.636	60.08	1.349	57.56	1.636	60.08
4	.520	310.73	.527	263.93	.568	331.02	.527	263.93	.568	331.02	.527	263.93	.568	331.02	.527	263.93
5	.769	307.10	.937	263.93	.777	307.86	.710	318.78	.777	307.86	.710	318.78	.777	307.86	.710	318.78
6	.287	110.00	.172	129.67	.268	106.80	.233	118.34	.268	106.80	.233	118.34	.268	106.80	.233	118.34
7	.250	53.56	.329	77.50	.237	80.01	.175	62.78	.237	80.01	.175	62.78	.237	80.01	.175	62.78
8	.148	18.00	.139	11.15	.057	9.91	.123	225.97	.057	9.91	.123	225.97	.057	9.91	.123	225.97
9	.094	204.77	.085	145.82	.117	256.11	.083	225.97	.117	256.11	.083	225.97	.117	256.11	.083	225.97
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*** STABILITY PARAMETER

XI = -.287

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 98 ALPHA-HCL = 6.0 PDP RUN.PT 21.06
RUN 21 ALPHA-PAP = .5 O-COMP = .32180
POINT 3 SIGMA = .45 V-REF = .198.90
COMPUTED FREQUENCY = 15.49, K = .1224
FOUPIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	-12	.921	-.452	-.189	-.224	-.211	-.149	-.107
2	-.557	-.048	-.048	-.080	-.055	-.014	-.035	-.026
3	-.007	-.208	-.157	-.175	-.171	-.079	-.195	-.110
4	-.023	-.019	-.024	-.012	-.002	-.010	-.220	-.198
5	-.033	-.059	-.006	-.020	-.013	-.025	-.035	-.104
6	-.033	-.133	-.019	-.037	-.013	-.014	-.028	-.105
7	-.033	-.022	-.009	-.030	-.013	-.021	-.021	-.095
8	-.032	-.013	-.009	-.016	-.007	-.015	-.026	-.065
9	-.019	-.038	-.025	-.020	-.007	-.023	-.001	-.005
10								

X	N	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	-.907	-.202	-.823	-.853	5.374	1.616	1.358	1.160
2	-.023	-.062	-.034	-.187	-.037	-.119	-.171	-.140
3	-.048	-.049	-.049	-.047	-.032	-.097	-.033	-.109
4	-.025	-.096	-.049	-.243	-.044	-.162	-.199	-.209
5	-.035	-.092	-.077	-.016	-.036	-.135	-.017	-.172
6	-.028	-.058	-.023	-.016	-.014	-.064	-.025	-.069
7	-.025	-.058	-.022	-.022	-.015	-.049	-.010	-.048
8	-.025	-.058	-.022	-.007	-.006	-.012	-.015	-.022
9	-.025	-.058	-.022	-.011	-.009	-.008	-.001	-.008
10								

X	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG
1	-.126	-.093	-.125	-.198	-.714	-.754	-.959
2	-.033	-.033	-.033	-.274	-.037	-.069	-.224
3	-.033	-.033	-.033	-.031	-.034	-.070	-.042
4	-.004	-.096	-.010	-.016	-.026	-.072	-.212
5	-.007	-.062	-.014	-.002	-.012	-.053	-.020
6	-.012	-.042	-.044	-.016	-.012	-.051	-.003
7	-.012	-.042	-.044	-.015	-.003	-.047	-.008
8	-.012	-.042	-.044	-.007	-.023	-.012	-.056
9	-.012	-.042	-.044	-.007	-.014	-.012	-.001
10							

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 98 ALPHA-MCL = 6.0 POP RUN-PT 21.06
RUN 21 ALPHA-RAP = 5.5 O-COMP = 32180
POINT 21 SIGMA = 45.0 V-REF = 198.90
COMPUTED FREQUENCY = 15.49, M = .1224

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

N	X = .012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	13.589	198.04	5.917	184.83	4.115	194.76	2.717	192.40	2.227	184.51	1.535	186.82	1.238	159.57
2	.717	140.96	.169	201.06	.189	176.09	.225	163.56	.227	137.62	.150	139.95	.122	127.38
3	.213	31.44	.101	241.80	.127	230.97	.100	236.46	.147	229.81	.293	221.58	.291	244.94
4	.209	268.10	.123	236.77	.126	231.97	.279	232.26	.294	229.81	.118	227.49	.109	222.94
5	.023	68.97	.038	256.97	.037	264.09	.122	270.73	.117	276.47	.021	287.49	.024	288.25
6	.063	58.53	.136	99.00	.133	122.43	.019	133.60	.027	155.81	.021	166.89	.106	193.50
7	.136	257.16	.038	277.82	.045	281.69	.127	282.20	.128	289.04	.056	284.20	.066	293.15
8	.023	107.16	.031	146.94	.045	104.68	.052	103.94	.051	107.45	.028	117.53	.010	111.33
9	.013	22.30	.014	138.17	.016	165.56	.009	142.54	.010	371.44	.022	91.81	.014	121.15
10	.042	64.00	.025	79.46	.023	95.56	.025	86.31	.024	773.44				

N	X = .774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.148-LOWER		.261-LOWER	
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.112	144.67	.998	145.61	.997	148.82	5.784	21.71	2.444	48.63	1.747	40.51	1.112	56.31
2	.204	187.62	.207	169.63	.190	190.19	.146	252.44	.120	174.18	.175	193.10	.119	188.36
3	.128	240.84	.119	246.02	.080	231.25	.102	251.73	.121	248.18	.114	253.03	.110	250.82
4	.298	221.81	.324	223.99	.324	221.40	.267	217.31	.284	220.80	.289	226.42	.295	231.45
5	.099	299.30	.089	303.51	.075	306.18	.153	253.18	.137	262.00	.113	263.47	.109	275.44
6	.025	175.76	.008	155.98	.018	159.08	.036	181.68	.036	187.42	.018	164.47	.074	163.22
7	.098	290.88	.104	288.44	.085	290.96	.065	282.08	.067	188.51	.073	190.22	.074	182.75
8	.064	115.85	.066	116.17	.064	109.95	.049	107.88	.050	100.16	.047	102.01	.050	121.45
9	.005	181.02	.026	113.45	.008	149.37	.006	4.38	.013	296.65	.023	105.41	.023	119.86
10	.019	70.65	.026	76.42	.018	55.09	.013	226.36	.008	95.17	.008	79.48	.012	109.51

N	X = .392-LOWER		.530-LOWER		.661-LOWER		.774-LOWER		.860-LOWER		.910-LOWER			
	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI		
1	.706	79.69	.750	99.62	.578	110.07	.846	147.62	.604	159.63	1.087	151.92		
2	.191	189.81	.231	189.31	.209	192.73	.214	181.33	.192	200.98	.229	192.34		
3	.105	234.67	.129	243.46	.094	251.02	.073	245.17	.083	237.48	.070	242.55		
4	.299	224.97	.369	227.11	.324	228.12	.373	225.46	.329	237.97	.310	227.03		
5	.096	272.21	.114	280.77	.083	281.46	.086	287.78	.075	272.20	.061	301.21		
6	.008	154.73	.014	93.82	.073	101.57	.015	83.60	.051	64.38	.020	172.00		
7	.071	283.60	.084	286.21	.073	282.55	.062	284.80	.051	279.04	.060	276.30		
8	.046	109.90	.056	104.67	.050	108.14	.058	97.83	.052	115.38	.063	117.53		
9	.015	309.90	.029	318.67	.009	304.75	.027	329.08	.017	50.64	.018	74.59		
10	.009	71.20	.017	65.59	.014	83.08	.025	55.79	.026	50.64				

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 98 ALPHA-MCL = 6.0 PCP RUN.PT 21.06
PUN, 21 ALPHA-PAP = .5 O-COMP = .3218C
POINT SIGMA = 45. V-REF = 198.9D
COMPUTED FREQUENCY = 15.49, K = .1224

FOURIER COEFFICIENTS, PEAL & IMAGINARY

*** BLADE PRESSURES, NORMAL FORCE, PER RADIAN ***

X	012	062	148	261	392	530	661
N	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	18.295	6.349	5.338	2.209	3.270	1.508	2.137
2	-.520	-.573	-.016	-.033	-.032	-.018	-.016
3	-.213	-.208	-.047	-.011	-.019	-.020	-.035
4	-.205	-.047	-.038	-.015	-.013	-.010	-.022
5	-.032	-.127	-.015	-.013	-.009	-.014	-.017
6	-.060	-.060	-.030	-.027	-.003	-.009	-.017
7	-.044	-.069	-.003	-.081	-.013	-.061	-.025
8	-.008	-.025	-.000	-.035	-.013	-.008	-.034
9	-.004	-.012	-.031	-.026	-.025	-.020	-.004
10	-.028	-.048	-.005	-.015	-.006	-.013	-.004

X	012	060	090	110	130	150	170
N	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	18.295	6.349	5.338	2.209	3.270	1.508	2.137
2	-.520	-.573	-.016	-.033	-.032	-.018	-.016
3	-.213	-.208	-.047	-.011	-.019	-.020	-.035
4	-.205	-.047	-.038	-.015	-.013	-.010	-.022
5	-.032	-.127	-.015	-.013	-.009	-.014	-.017
6	-.060	-.060	-.030	-.027	-.003	-.009	-.017
7	-.044	-.069	-.003	-.081	-.013	-.061	-.025
8	-.008	-.025	-.000	-.035	-.013	-.008	-.034
9	-.004	-.012	-.031	-.026	-.025	-.020	-.004
10	-.028	-.048	-.005	-.015	-.006	-.013	-.004

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7
GAP FRACTION	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	18.295	6.349	5.338	2.209	3.270	1.508	2.137
2	-.520	-.573	-.016	-.033	-.032	-.018	-.016
3	-.213	-.208	-.047	-.011	-.019	-.020	-.035
4	-.205	-.047	-.038	-.015	-.013	-.010	-.022
5	-.032	-.127	-.015	-.013	-.009	-.014	-.017
6	-.060	-.060	-.030	-.027	-.003	-.009	-.017
7	-.044	-.069	-.003	-.081	-.013	-.061	-.025
8	-.008	-.025	-.000	-.035	-.013	-.008	-.034
9	-.004	-.012	-.031	-.026	-.025	-.020	-.004
10	-.028	-.048	-.005	-.015	-.006	-.013	-.004

*** STABILITY PARAMETER

* XI = -.3421 *

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 98 ALPHA-MCL = 6.0 PDP RUN-PT 21.06
RUN 21 ALPHA-BAR = 4.5 Q-COMP = 32180
POINT SIGMA = 4.5 V-REF = 198.90
COMPUTED FREQUENCY = 15.49, K = .1224
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM
1	19.365	19.14	8.064	24.54	5.777	22.48	3.601
2	.789	311.28	.106	51.27	.056	288.81	.037
3	.298	224.20	.023	277.04	.048	346.96	.028
4	.210	255.97	.069	147.16	.028	147.37	.017
5	.085	225.20	.131	300.86	.013	192.60	.016
6	.082	57.50	.052	234.32	.027	275.06	.009
7	.026	108.32	.072	87.84	.061	91.47	.063
8	.013	289.18	.019	89.21	.005	77.93	.032
9	.055	239.76	.026	307.53	.040	320.64	.015
10			.017	252.19	.016	293.52	.015

X =	.774	.860	.910				
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM
1	.271	315.42	.292	283.81	.106	182.37	.040
2	.025	118.83	.042	308.56	.046	202.51	.016
3	.047	53.33	.039	244.64	.016	289.38	.034
4	.078	239.46	.008	270.13	.034	337.16	.016
5	.022	169.50	.046	181.69	.016	145.70	.005
6	.029	27.05	.013	334.68	.005	223.40	.022
7	.037	121.17	.054	317.44	.005	179.67	.010
8	.020	359.74	.013	267.33	.005	285.31	.006
9	.031	333.74	.023	322.14	.010	343.02	.006
10	.009	22.28	.021	333.81	.006	156.05	

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	W1	W2	W4	W6	W10	W125
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	.920	154.57	1.719	332.00	13.312	191.23	8.024
2	.260	188.67	.420	207.50	.486	200.89	.061
3	.189	252.71	.073	221.85	.399	210.89	.150
4	.373	230.98	.453	251.39	.201	269.74	.602
5	.197	250.15	.118	248.01	.096	117.53	.310
6	.049	169.18	.067	119.56	.211	270.47	.059
7	.145	281.18	.169	275.56	.053	150.11	.138
8	.060	293.19	.061	106.42	.018	111.11	.035
9	.048	333.24	.042	345.89	.036	114.48	.049
10	.038	113.71	.012	181.63	.036	105.65	.117

*** STABILITY PARAMETER

* XI = -.3421
*

X	.012-UPPER		.062-UPPER		.148-UPPER		.261-UPPER		.392-UPPER		.530-UPPER		.661-UPPER	
N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	-12.451	-3.660	-5.090	-1.334	-3.353	-.881	-2.037	-.522	-1.370	-.140	-.839	-.318	-.382	
2	-.231	-.526	-.368	-.072	-.300	-.300	-.332	-.333	-.371	-.359	-.407	-.402	-.397	
3	-.255	-.216	-.151	-.074	-.126	-.074	-.155	-.085	-.142	-.085	-.140	-.082	-.120	
4	-.038	-.045	-.022	-.010	-.006	-.002	-.016	-.015	-.015	-.005	-.025	-.018	-.032	
5	-.044	-.045	-.045	-.011	-.045	-.001	-.057	-.002	-.064	-.005	-.067	-.013	-.005	
6	-.095	-.020	-.058	-.005	-.066	-.025	-.062	-.036	-.044	-.009	-.069	-.044	-.037	
7	-.095	-.014	-.038	-.002	-.029	-.015	-.030	-.016	-.036	-.025	-.037	-.029	-.038	
8	-.025	-.009	-.008	-.006	-.007	-.007	-.010	-.007	-.009	-.006	-.013	-.014	-.011	
9	-.015	-.019	-.001	-.009	-.010	-.010	-.006	-.007	-.014	-.010	-.013	-.006	-.024	
10													-.002	

X	.774-UPPER		.860-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.148-LOWER		.261-LOWER	
N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	-.263	-.685	-.172	-.646	-.221	-.581	5.694	2.009	2.312	1.947	1.907	1.168	1.183	
2	-.402	-.383	-.424	-.394	-.398	-.398	4.12	-.633	4.18	-.439	3.67	-.432	3.798	
3	-.117	-.042	-.132	-.090	-.126	-.097	1.79	-.061	1.90	-.075	1.71	-.078	1.533	
4	-.025	-.185	-.023	-.185	-.037	-.169	1.027	-.166	1.14	-.188	1.005	-.161	1.057	
5	-.039	-.007	-.045	-.004	-.038	-.005	1.044	-.002	1.02	-.005	1.023	-.005	1.004	
6	-.061	-.002	-.063	-.003	-.059	-.012	1.082	-.064	1.067	-.012	1.061	-.013	1.021	
7	-.054	-.045	-.062	-.048	-.064	-.043	1.073	-.056	1.069	-.016	1.047	-.070	1.084	
8	-.032	-.029	-.033	-.036	-.030	-.028	1.037	-.027	1.034	-.019	1.032	-.025	1.031	
9	-.006	-.011	-.013	-.006	-.005	-.009	1.036	-.001	1.021	-.009	1.020	-.010	1.015	
10	-.028	-.002	-.036	-.003	-.032	-.002	1.021	-.005	1.018	-.002	1.022	-.001	1.004	

[illegible]

OCMI PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 101 ALPHA-MCL = 6.0 PDP RUN-PT 21.09
KUN 21 ALPHA-BAR = .5 Q-COMP = 3215C
POINT 6 SIGMA = 45. V-REF = 198.81
COMPUTED FREQUENCY = 19.07, K = .1507
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	12	.978	196.38	.521	194.68	.422	194.71	.471	194.36	.377	185.98	.565	150.58	.869	150.58	.565	150.58	.869	150.58
2	12	.574	113.69	.521	114.96	.422	114.96	.471	114.96	.377	114.96	.565	114.96	.869	114.96	.565	114.96	.869	114.96
3	12	.334	40.28	.167	25.49	.167	25.49	.167	25.49	.167	25.49	.167	25.49	.167	25.49	.167	25.49	.167	25.49
4	12	.059	129.79	.011	114.49	.007	97.48	.007	97.48	.007	97.48	.007	97.48	.007	97.48	.007	97.48	.007	97.48
5	12	.066	131.78	.011	114.49	.007	97.48	.007	97.48	.007	97.48	.007	97.48	.007	97.48	.007	97.48	.007	97.48
6	12	.046	282.08	.046	282.08	.046	282.08	.046	282.08	.046	282.08	.046	282.08	.046	282.08	.046	282.08	.046	282.08
7	12	.021	255.10	.058	4.74	.073	357.52	.072	357.52	.072	357.52	.072	357.52	.072	357.52	.072	357.52	.072	357.52
8	12	.024	233.70	.030	3.30	.033	20.05	.034	27.02	.034	27.02	.034	27.02	.034	27.02	.034	27.02	.034	27.02
9	12	.026	200.96	.010	323.34	.012	323.34	.012	323.34	.012	323.34	.012	323.34	.012	323.34	.012	323.34	.012	323.34
10	12	.024	128.04	.009	60.93	.014	46.09	.009	60.93	.009	60.93	.009	60.93	.009	60.93	.009	60.93	.009	60.93

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	12	.734	111.02	.669	104.93	.622	110.84	.638	19.43	.022	40.10	.236	31.49	.236	31.49	.236	31.49	.236	31.49
2	12	.556	316.38	.579	317.11	.558	317.47	.755	303.05	.204	313.63	.204	313.63	.204	313.63	.204	313.63	.204	313.63
3	12	.143	97.72	.160	34.32	.159	18.96	.189	18.96	.189	18.96	.189	18.96	.189	18.96	.189	18.96	.189	18.96
4	12	.040	349.49	.186	96.99	.170	95.79	.168	80.61	.168	80.61	.168	80.61	.168	80.61	.168	80.61	.168	80.61
5	12	.061	1.59	.063	8.08	.038	352.24	.044	21.37	.025	12.46	.025	12.46	.025	12.46	.025	12.46	.025	12.46
6	12	.070	39.49	.078	37.48	.084	6.74	.088	21.37	.068	38.89	.068	38.89	.068	38.89	.068	38.89	.068	38.89
7	12	.043	41.59	.048	47.24	.041	43.35	.092	37.59	.088	38.89	.088	38.89	.088	38.89	.088	38.89	.088	38.89
8	12	.013	306.03	.014	13.52	.011	297.15	.046	35.46	.039	28.96	.039	28.96	.039	28.96	.039	28.96	.039	28.96
9	12	.028	3.79	.036	13.52	.032	3.08	.021	14.56	.023	337.69	.023	337.69	.023	337.69	.023	337.69	.023	337.69
10	12	.028	3.79	.036	13.52	.032	3.08	.021	14.56	.023	337.69	.023	337.69	.023	337.69	.023	337.69	.023	337.69

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	12	.042	51.51	.059	60.83	.006	63.65	.695	101.00	.714	106.55	.739	111.77	.739	111.77	.739	111.77	.739	111.77
2	12	.520	313.65	.605	315.83	.528	315.93	.557	318.33	.548	316.37	.548	316.37	.548	316.37	.548	316.37	.548	316.37
3	12	.169	94.92	.210	29.71	.179	28.88	.203	10.29	.183	27.36	.183	27.36	.183	27.36	.183	27.36	.183	27.36
4	12	.021	12.80	.031	96.62	.026	96.19	.043	97.78	.034	97.39	.034	97.39	.034	97.39	.034	97.39	.034	97.39
5	12	.022	18.29	.065	12.55	.052	13.70	.070	1.75	.064	8.60	.064	8.60	.064	8.60	.064	8.60	.064	8.60
6	12	.070	50.46	.087	63.58	.071	45.70	.071	51.53	.069	49.95	.069	49.95	.069	49.95	.069	49.95	.069	49.95
7	12	.037	45.58	.042	47.75	.039	42.71	.039	42.71	.039	42.71	.039	42.71	.039	42.71	.039	42.71	.039	42.71
8	12	.015	333.09	.016	332.09	.013	323.27	.006	325.40	.008	326.92	.008	326.92	.008	326.92	.008	326.92	.008	326.92
9	12	.027	4.91	.036	8.74	.031	16.03	.036	9.26	.035	10.62	.035	10.62	.035	10.62	.035	10.62	.035	10.62
10	12	.027	4.91	.036	8.74	.031	16.03	.036	9.26	.035	10.62	.035	10.62	.035	10.62	.035	10.62	.035	10.62

ORIGINAL PAGE IS
OF POOR QUALITY

	W1 -125	W2 .007	W4 .125	W6 .500	W10 1.125
1	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL
2	CPIMAG	CPIMAG	CPIMAG	CPIMAG	CPIMAG
3	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL
4	CPIMAG	CPIMAG	CPIMAG	CPIMAG	CPIMAG
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0	CPIMAG	CPIMAG	CPIMAG	CPIMAG	CPIMAG

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 101 ALPHA-MCL = 6.0 PDP RUN-PT 21.09
KUN 21 ALPHA-BAR = 45.5 O-COMP = .32150
POINT 6 SIGMA = 45.5 V-REF = 198.81
COMPUTED FREQUENCY = 19.07, K = .1507

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE, PER RADIAN ***
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661	
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	19.011	17.35	8.096	23.99	5.645	21.29	3.574	25.69
2	1.325	299.01	.088	305.47	.150	298.00	.080	305.58
3	.173	243.74	.039	5.18	.045	5.81	.016	99.12
4	.137	61.57	.036	.95	.027	350.67	.015	197.62
5	.100	332.05	.029	351.71	.018	22.36	.018	23.05
6	.105	46.95	.031	46.50	.022	39.29	.026	60.85
7	.109	44.32	.052	77.86	.050	114.99	.056	118.96
8	.070	41.76	.018	75.67	.011	75.77	.015	93.29
9	.061	8.00	.013	348.57	.011	349.47	.017	334.16
10	.038	339.10	.018	338.39	.015	322.95	.025	351.89

X =	.774	.860	.910																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</
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*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10	
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	.430	87.92	2.637	349.25	12.709	190.74
2	.687	307.18	.748	289.27	.384	314.74
3	.266	16.51	.392	126.32	.306	110.28
4	.199	92.59	.187	45.13	.368	190.54
5	.011	54.05	.077	234.70	.077	298.76
6	.060	347.60	.039	23.94	.048	359.80
7	.116	40.73	.140	93.17	.077	359.80
8	.045	39.14	.080	304.94	.035	86.08
9	.042	42.70	.055	304.94	.020	228.85
10	.019	42.70	.028	77.21	.020	125.85

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*** STABILITY PARAMETER

* XI = -.3083 *
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OCMI PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 114 ALPHA-MCL = 6.0 PDP RUN-PT 24.42
 RUN 114 ALPHA-RAR = .5 C-COMP = 32.48
 POINT 1 SIGMA = 9.0 V-REF = 195.46
 COMPUTED FREQUENCY = 9.06, K = .5714
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	18.590	197.75	1.381	19.37	2.668	199.37	1.894	190.19	1.660	199.93
2	11.450	177.00	1.007	141.11	1.820	141.11	1.292	140.27	1.935	136.16
3	11.440	294.20	1.016	146.04	1.964	146.04	1.662	140.82	1.935	136.16
4	2.511	297.20	1.151	152.85	1.533	152.85	1.161	141.28	1.671	132.94
5	2.551	340.41	1.209	159.07	1.303	159.07	1.229	144.64	1.301	122.50
6	2.364	293.00	1.132	158.86	1.427	158.86	1.149	145.64	1.162	121.44
7	2.277	51.93	1.070	157.91	1.057	157.91	1.073	147.20	1.082	120.35
8	1.24	8.65	1.073	157.91	1.057	157.91	1.073	147.20	1.082	120.35
9	1.24	8.65	1.073	157.91	1.057	157.91	1.073	147.20	1.082	120.35
10	1.24	8.65	1.073	157.91	1.057	157.91	1.073	147.20	1.082	120.35

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
2	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
3	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
4	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
5	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
6	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
7	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
8	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
9	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74
10	1.354	146.74	1.748	147.44	1.363	147.44	1.241	146.74	1.241	146.74

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
2	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
3	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
4	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
5	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
6	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
7	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
8	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
9	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79
10	1.445	28.41	1.226	28.79	1.422	28.79	1.422	28.79	1.422	28.79

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

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114 ALPHA-WCL = 6.0
24 ALPHA-PAR = .5
POINT SIGMA = 90.
COMPUTED FREQUENCY = 9.96, K = .3714
COMPUTED FREQUENCY = 9.96, K = .3714
V-DEF = 199.46
C-COMP = 323.48
PMP RUN-PT = 34.53

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 0.06, K =

X	DELCP# ⁰¹²	DELCP# ⁻⁶²	DELCP# ¹⁴⁸	DELCP# ²⁶¹	DELCP# ³⁹²	DELCP# ⁵³⁰	DELCP# ⁶⁶¹
1	26.770	8.587	7.396	4.837	3.253	2.915	2.198
2	27.761	-1.225	7.411	1.343	3.263	2.735	2.190
3	28.752	1.136	7.027	1.476	3.073	2.545	2.038
4	29.743	2.441	6.643	1.608	2.882	2.355	1.885
5	30.734	3.746	6.259	1.740	2.692	2.165	1.732
6	31.725	5.051	5.875	1.872	2.502	1.975	1.579
7	32.716	6.356	5.501	2.004	2.312	1.785	1.426
8	33.707	7.661	5.127	2.136	2.122	1.595	1.273
9	34.698	8.966	4.753	2.268	1.932	1.405	1.120
10	35.689	10.271	4.379	2.400	1.742	1.215	0.967
11	36.680	11.576	4.005	2.532	1.552	1.025	0.814
12	37.671	12.881	3.631	2.664	1.362	0.835	0.661
13	38.662	14.186	3.257	2.796	1.172	0.645	0.508
14	39.653	15.491	2.883	2.928	0.982	0.455	0.355
15	40.644	16.796	2.509	3.060	0.792	0.265	0.202
16	41.635	18.101	2.135	3.192	0.602	0.075	0.049
17	42.626	19.406	1.761	3.324	0.412	-0.115	-0.079
18	43.617	20.711	1.387	3.456	0.222	-0.305	-0.251
19	44.608	22.016	1.013	3.588	0.032	-0.495	-0.423
20	45.599	23.321	0.639	3.720	-0.158	-0.685	-0.595
21	46.590	24.626	0.265	3.852	-0.348	-0.875	-0.767
22	47.581	25.931	-0.109	3.984	-0.538	-1.065	-0.939
23	48.572	27.236	-0.485	4.116	-0.728	-1.255	-1.111
24	49.563	28.541	-0.861	4.248	-0.918	-1.445	-1.283
25	50.554	29.846	-1.237	4.380	-1.108	-1.635	-1.455
26	51.545	31.151	-1.613	4.512	-1.298	-1.825	-1.627
27	52.536	32.456	-1.989	4.644	-1.488	-2.015	-1.799
28	53.527	33.761	-2.365	4.776	-1.678	-2.205	-1.971
29	54.518	35.066	-2.741	4.908	-1.868	-2.395	-2.143
30	55.509	36.371	-3.117	5.040	-2.058	-2.585	-2.315
31	56.500	37.676	-3.493	5.172	-2.248	-2.775	-2.487
32	57.491	38.981	-3.869	5.304	-2.438	-2.965	-2.659
33	58.482	40.286	-4.245	5.436	-2.628	-3.155	-2.831
34	59.473	41.591	-4.621	5.568	-2.818	-3.345	-3.003
35	60.464	42.896	-5.000	5.700	-3.008	-3.535	-3.175
36	61.455	44.201	-5.376	5.832	-3.198	-3.725	-3.347
37	62.446	45.506	-5.752	5.964	-3.388	-3.915	-3.519
38	63.437	46.811	-6.128	6.096	-3.578	-4.105	-3.691
39	64.428	48.116	-6.504	6.228	-3.768	-4.295	-3.863
40	65.419	49.421	-6.880	6.360	-3.958	-4.485	-4.035
41	66.410	50.726	-7.256	6.492	-4.148	-4.675	-4.207
42	67.401	52.031	-7.632	6.624	-4.338	-4.865	-4.379
43	68.392						

X =	77°		90°		91°		N	CMREAL	CMIMAG
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP			
1.45	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.50	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.55	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.60	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.65	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.70	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.75	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.80	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.85	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.90	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
1.95	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.00	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.05	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.10	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.15	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.20	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.25	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.30	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.35	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.40	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.45	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.50	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.55	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.60	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.65	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.70	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.75	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.80	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.85	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.90	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
2.95	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25
3.00	1.05	1.25	1.05	1.25	1.05	1.25	1	1.05	1.25

*** STABILITY PARAMETER

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*** WALL PRESSURES, PER REGION ***
      WALL NO.      W1      W2      W3      W4      W5      W6      W7      W8
CAP FRACTION N CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG
      -125      -730      -125      -1.5      -1.125      -1.125      -1.125
* XI = -.4355 *

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*** ALL PRESSURES, PER RADIAN ***

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

IM

24

45

34

21

10

276

ORIGINAL QUALITY
OF POOL QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 114 ALPHA-MCL = 6.0 PDP RUN-PT 24.02
 RUN 24 ALPHA-RAR = .5 C-CMP = 32348
 POINT 1 SIGMA = 93 V-REF = 199.46
 1 COMPUTED FREQUENCY = 9.06 K = .0714
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	X = DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
2	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
3	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
4	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
5	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
6	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
7	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
8	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
9	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
10	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14

N	X = DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
2	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
3	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
4	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
5	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
6	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
7	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
8	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
9	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14
10	27.637	18.12	10.657	20.14	7.695	18.53	5.063	17.45	3.353	10.58	2.816	359.14

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
1	1	1	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
2	1	2	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
3	1	3	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
4	1	4	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
5	1	5	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
6	1	6	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
7	1	7	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
8	1	8	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
9	1	9	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431
10	1	10	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431	1.431

*** STABILITY PARAMETER

* XI = -.4355
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ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 116 ALPHA-WCL = 6.2 POP RUN-PT 24.64
RUY 23 ALPHA-PAB = 9.3 C-COMP = 22.58
POINT 3 SIGMA = 9.3 V-REF = 199.48
COMPUTED FREQUENCY = 15.51, K = .1222

FOUPIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	17	550	323	262	148	261	392	530	661	530	661
2	17	550	323	262	148	261	392	530	661	530	661
3	17	550	323	262	148	261	392	530	661	530	661
4	17	550	323	262	148	261	392	530	661	530	661
5	17	550	323	262	148	261	392	530	661	530	661
6	17	550	323	262	148	261	392	530	661	530	661
7	17	550	323	262	148	261	392	530	661	530	661
8	17	550	323	262	148	261	392	530	661	530	661
9	17	550	323	262	148	261	392	530	661	530	661
10	17	550	323	262	148	261	392	530	661	530	661

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	17	550	323	262	148	261	392	530	661	530	661	530	661
2	17	550	323	262	148	261	392	530	661	530	661	530	661
3	17	550	323	262	148	261	392	530	661	530	661	530	661
4	17	550	323	262	148	261	392	530	661	530	661	530	661
5	17	550	323	262	148	261	392	530	661	530	661	530	661
6	17	550	323	262	148	261	392	530	661	530	661	530	661
7	17	550	323	262	148	261	392	530	661	530	661	530	661
8	17	550	323	262	148	261	392	530	661	530	661	530	661
9	17	550	323	262	148	261	392	530	661	530	661	530	661
10	17	550	323	262	148	261	392	530	661	530	661	530	661

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	17	550	323	262	148	261	392	530	661	520	320	520	320
2	17	550	323	262	148	261	392	530	661	520	320	520	320
3	17	550	323	262	148	261	392	530	661	520	320	520	320
4	17	550	323	262	148	261	392	530	661	520	320	520	320
5	17	550	323	262	148	261	392	530	661	520	320	520	320
6	17	550	323	262	148	261	392	530	661	520	320	520	320
7	17	550	323	262	148	261	392	530	661	520	320	520	320
8	17	550	323	262	148	261	392	530	661	520	320	520	320
9	17	550	323	262	148	261	392	530	661	520	320	520	320
10	17	550	323	262	148	261	392	530	661	520	320	520	320

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- UCWT PERIODICITY TEST
CENTER BLADE DATA, HALL STATIONS

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FILE 116  ALPHA-MCL = 6.0  POP RUN.PI 323.48
RUN 24  ALPHA-BAR = .5  Q-COMP = 199.46
POINT 3  SIGMA = 9J.  V-REF = 1.222
COMPUTED FREQUENCY = 15.51, K = .1222
AMPLITUDE AND PHASE ANGLE

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FOUPIER COEFFICIENTS,
*** BLADE PRESSURES,[illegible]

X	N	= 774-UPPER CP-MAG	PHI	= 860-UPPER CP-MAG	PHI	910-UPPER CP-MAG	PHI	= 012-LOWER CP-MAG	PHI	= 062-LOWER CP-MAG	PHI	= 148-LOWER CP-MAG	PHI	= 261-LOWER CP-MAG	PHI
1	1	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
2	2	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
3	3	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
4	4	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
5	5	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
6	6	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
7	7	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
8	8	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
9	9	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97
10	10	817	1167	1167	117	158	358	9	497	5	463	4	384	3	97

X	M	392-LOWER		530-LOWER		6681-LOWER		774-LOWER		860-LOWER		910-LOWER	
		CP	MAG	CP	MAG	CP	MAG	CP	MAG	CP	MAG	CP	MAG
2	59	11	89	2	73	2	16	2	29	1	73	2	25
3	59	11	89	2	73	2	16	2	29	1	73	2	25
4	59	11	89	2	73	2	16	2	29	1	73	2	25
5	59	11	89	2	73	2	16	2	29	1	73	2	25
6	59	11	89	2	73	2	16	2	29	1	73	2	25
7	59	11	89	2	73	2	16	2	29	1	73	2	25
8	59	11	89	2	73	2	16	2	29	1	73	2	25
9	59	11	89	2	73	2	16	2	29	1	73	2	25
10	59	11	89	2	73	2	16	2	29	1	73	2	25
11	59	11	89	2	73	2	16	2	29	1	73	2	25
12	59	11	89	2	73	2	16	2	29	1	73	2	25
13	59	11	89	2	73	2	16	2	29	1	73	2	25
14	59	11	89	2	73	2	16	2	29	1	73	2	25
15	59	11	89	2	73	2	16	2	29	1	73	2	25
16	59	11	89	2	73	2	16	2	29	1	73	2	25
17	59	11	89	2	73	2	16	2	29	1	73	2	25
18	59	11	89	2	73	2	16	2	29	1	73	2	25
19	59	11	89	2	73	2	16	2	29	1	73	2	25
20	59	11	89	2	73	2	16	2	29	1	73	2	25
21	59	11	89	2	73	2	16	2	29	1	73	2	25
22	59	11	89	2	73	2	16	2	29	1	73	2	25
23	59	11	89	2	73	2	16	2	29	1	73	2	25
24	59	11	89	2	73	2	16	2	29	1	73	2	25
25	59	11	89	2	73	2	16	2	29	1	73	2	25
26	59	11	89	2	73	2	16	2	29	1	73	2	25
27	59	11	89	2	73	2	16	2	29	1	73	2	25
28	59	11	89	2	73	2	16	2	29	1	73	2	25
29	59	11	89	2	73	2	16	2	29	1	73	2	25
30	59	11	89	2	73	2	16	2	29	1	73	2	25
31	59	11	89	2	73	2	16	2	29	1	73	2	25
32	59	11	89	2	73	2	16	2	29	1	73	2	25
33	59	11	89	2	73	2	16	2	29	1	73	2	25
34	59	11	89	2	73	2	16	2	29	1	73	2	25
35	59	11	89	2	73	2	16	2	29	1	73	2	25
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ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCMT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 116 ALPHA-MCL = 6.3 POP RUN-PT 24.04
 RUN 24 ALPHA-PAR = 93.0 O-COMP = 32348
 POINT 3 ALPHA-SIGMA = 93.0 V-REF = 199.46
 COMPUTED FREQUENCY = 15.51, K = .1222

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
2	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
3	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
4	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
5	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
6	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
7	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
8	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
9	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
10	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
2	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
3	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
4	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
5	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
6	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
7	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
8	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
9	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
10	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
2	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
3	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
4	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
5	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
6	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
7	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
8	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
9	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92
10	27.383	19.74	10.690	21.05	7.555	19.517	4.972	23.81	3.301	10.92

*** STABILITY PARAMETER

* XI = -.3348
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MODE 1 -- CENTER BLADE DATA, WALL STATIONS

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FILE 113 ALPHA-XCL = 6.0 P.P. SUM.PI = 3229.4
RUN 24 ALPHA-RAR = 9.5 Q-COMP = 199.14
3 SIGMA = 1.0 V-CREF = 1.510
COMPUTED FREQUENCY = 19.15, K = 1.510
REAL & IMAGINARY

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	CP = EAL	UPPER CPIMAG	CPREAL	UPPER CPIMAG	CPREAL	UPPER CPIMAG	CPREAL	UPPER CPIMAG	CPREAL	UPPER CPIMAG	CPREAL	UPPER CPIMAG	CPREAL	UPPER CPIMAG	CPREAL	UPPER CPIMAG
1	-16.650	-3.786	-5.909	-3.345	-3.864	1452	1.476	-1.973	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
2	-5.444	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
3	-5.777	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
4	-5.661	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
5	-5.661	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
6	-5.661	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
7	-5.661	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
8	-5.661	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
9	-5.661	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	
10	-5.661	-3.220	-3.421	-1.445	-2.559	1472	1.476	-1.272	1.598	-1.677	1.369	-1.849	1.493	-1.369	1.598	

X	N	= 274-UPPER CP=REAL CPI MAG	860-UPPER CP=REAL CPI MAG	913-UPPER CP=REAL CPI MAG	912-LOWER CP=REAL CPI MAG	962-LOWER CP=REAL CPI MAG	148-LOWER CP=REAL CPI MAG	261-LOWER CP=REAL CPI MAG
1	127	1.792	1.669	1.594	1.533	4.035	3.105	2.049
2	134	1.458	1.424	1.394	1.315	4.035	3.105	2.049
3	137	1.357	1.200	1.118	1.057	4.035	3.105	2.049
4	138	1.331	1.171	1.063	1.013	4.035	3.105	2.049
5	144	1.308	1.142	1.036	0.977	4.035	3.105	2.049
6	149	1.289	1.113	1.006	0.947	4.035	3.105	2.049
7	154	1.271	1.084	0.977	0.918	4.035	3.105	2.049
8	159	1.253	1.055	0.948	0.889	4.035	3.105	2.049
9	164	1.235	1.026	0.919	0.860	4.035	3.105	2.049
10	169	1.217	0.997	0.890	0.831	4.035	3.105	2.049
11	174	1.199	0.968	0.861	0.802	4.035	3.105	2.049
12	179	1.181	0.939	0.832	0.773	4.035	3.105	2.049
13	184	1.163	0.910	0.803	0.744	4.035	3.105	2.049
14	189	1.145	0.881	0.774	0.715	4.035	3.105	2.049
15	194	1.127	0.852	0.745	0.686	4.035	3.105	2.049
16	199	1.109	0.823	0.716	0.657	4.035	3.105	2.049
17	204	1.091	0.794	0.687	0.628	4.035	3.105	2.049
18	209	1.073	0.765	0.658	0.599	4.035	3.105	2.049
19	214	1.055	0.736	0.629	0.570	4.035	3.105	2.049
20	219	1.037	0.707	0.600	0.541	4.035	3.105	2.049
21	224	1.019	0.678	0.571	0.512	4.035	3.105	2.049
22	229	1.001	0.649	0.542	0.483	4.035	3.105	2.049
23	234	0.983	0.620	0.513	0.454	4.035	3.105	2.049
24	239	0.965	0.591	0.484	0.425	4.035	3.105	2.049
25	244	0.947	0.562	0.455	0.396	4.035	3.105	2.049
26	249	0.929	0.533	0.426	0.367	4.035	3.105	2.049
27	254	0.911	0.504	0.397	0.338	4.035	3.105	2.049
28	259	0.893	0.475	0.368	0.309	4.035	3.105	2.049
29	264	0.875	0.446	0.339	0.280	4.035	3.105	2.049
30	269	0.857	0.417	0.310	0.251	4.035	3.105	2.049
31	274	0.839	0.388	0.281	0.222	4.035	3.105	2.049
32	279	0.821	0.359	0.252	0.193	4.035	3.105	2.049
33	284	0.803	0.330	0.223	0.164	4.035	3.105	2.049
34	289	0.785	0.301	0.194	0.135	4.035	3.105	2.049
35	294	0.767	0.272	0.165	0.106	4.035	3.105	2.049
36	299	0.749	0.243	0.136	0.077	4.035	3.105	2.049
37	304	0.731	0.214	0.107	0.048	4.035	3.105	2.049
38	309	0.713	0.185	0.078	0.019	4.035	3.105	2.049
39	314	0.695	0.156	0.049	0.000	4.035	3.105	2.049

[illegible]

MODE 1 -- CENTER PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 118 ALPHA-MCL = 6.5 PDP RUN-PI 2426
 RUN 124 ALPHA-RAR = 9.5 Q-COMP = 2228
 POINT 5 SIGMA = 9.5 V-REF = 199.24
 S COMPUTED FREQUENCY = 19.15, K = .1510

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	17.075	192.81	5.917	182.94	2.566	167.95	2.331	152.418	2.316	136.35
2	11.625	199.77	1.470	147.24	1.330	161.25	1.331	152.418	1.334	136.35
3	8.496	226.60	1.444	261.60	1.073	166.58	1.139	265.01	1.193	260.79
4	8.074	332.95	1.774	147.64	1.073	161.25	1.020	166.05	1.047	182.03
5	8.088	334.40	1.774	147.64	1.073	161.25	1.020	166.05	1.047	182.03
6	8.088	334.40	1.774	147.64	1.073	161.25	1.020	166.05	1.047	182.03
7	8.088	334.40	1.774	147.64	1.073	161.25	1.020	166.05	1.047	182.03
8	8.088	334.40	1.774	147.64	1.073	161.25	1.020	166.05	1.047	182.03
9	8.088	334.40	1.774	147.64	1.073	161.25	1.020	166.05	1.047	182.03
10	8.088	334.40	1.774	147.64	1.073	161.25	1.020	166.05	1.047	182.03

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2.117	132.81	1.908	119.47	1.789	117.47	1.789	117.47	1.789	117.47
2	1.337	266.75	1.337	266.75	1.337	266.75	1.337	266.75	1.337	266.75
3	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14
4	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14
5	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14
6	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14
7	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14
8	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14
9	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14
10	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14	1.056	214.14

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2.229	57.72	2.398	65.35	2.398	65.35	2.398	65.35	2.398	65.35
2	1.116	252.18	1.116	252.18	1.116	252.18	1.116	252.18	1.116	252.18
3	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28
4	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28
5	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28
6	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28
7	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28
8	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28
9	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28
10	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28	1.046	106.28

OF POOR QUALITY

WALL NO. CAP SECTION	W1		W2		W4		W6		W125		W135	
	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1.375	2.473	2.806	1.667	-14.307	-1.182	-1.753	930	1.393	-8.527		
2	1.367	2.555	3.449	1.440	-2.556	-1.164	1.353	518	1.155	-8.674		
3	1.398	2.149	1.155	1.159	-2.933	-1.339	1.16	149	-	333		
4	1.395	2.46	2.041	1.187	-1.655	-1.767	1.82	16	-	325		
5	1.36	2.50	1.11	1.16	-1.42	-1.172	1.07	29	1.06	373		
6	1.33	2.44	1.13	1.17	-1.22	-1.07	1.31	181	1.09	31		
7	1.35	2.40	1.11	1.16	-1.22	-1.07	1.13	17	1.17	014		
8	1.33	2.54	1.17	1.15	-1.25	-1.037	1.11	28	-	084		
9	1.32	2.14	1.12	1.11	-1.22	-1.034	1.07	27	-	023		
10	1.32	2.14	1.12	1.11	-1.22	-1.034	1.07	27	-	023		

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 118 ALPHA-MCL = 6.0 POP RUN-PT 24.06
RUN 24 ALPHA-RAR = .5 Q-COMP = 32280
POINT 5 SIGMA = 93.0 V-REF = 199.24
COMPUTED FREQUENCY = 19.15, K = .1510
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	25.870	19.51	10.615	20.68	7.369	19.14	4.929	21.45	3.274	14.19	2.700	11.18	2.053	356.05
2	21.656	214.13	.047	88.24	.053	85.25	.026	105.91	.057	129.75	.070	183.92	.041	157.95
3	.554	168.69	.042	284.27	.047	319.99	.025	337.18	.033	7.83	.062	124.04	.048	336.25
4	.137	135.77	.047	176.43	.044	155.99	.030	204.86	.031	216.92	.003	108.18	.005	348.24
5	.116	115.37	.046	110.64	.027	112.39	.016	121.61	.025	235.63	.013	123.60	.008	276.54
6	.113	49.97	.033	28.75	.022	43.47	.018	134.89	.021	335.24	.007	133.40	.009	95.07
7	.114	331.58	.032	349.93	.013	326.42	.015	192.38	.017	159.48	.016	165.22	.011	157.01
8	.080	227.98	.031	211.69	.020	167.06	.007	265.42	.005	3.96	.015	284.99	.005	176.06
9	.083	125.26												331.63
10														

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	983	355.28	.935	356.92	.382	354.92	.4	.083	.083	15.73	1.099	1.099	1.099	29.80
2	.116	86.23	.029	179.98	.033	171.57	.026	195.91	.033	164.53	.004	.004	.004	195.21
3	.052	167.95	.023	63.71	.022	191.38	.025	337.18	.025	160.72	.004	.004	.004	242.93
4	.012	355.86	.019	48.48	.022	25.34	.016	121.61	.010	177.62	.007	.007	.007	122.82
5	.010	308.84	.003	343.42	.003	338.72	.016	121.61	.009	137.62	.005	.005	.005	122.82
6	.013	218.94	.008	18.44	.006	159.50	.016	121.61	.004	43.54	.003	.003	.003	122.82
7	.010	222.08	.006	316.10	.007	174.29	.016	121.61	.004	351.04	.003	.003	.003	122.82
8	.007	285.08	.006	105.77	.004	108.20	.016	121.61	.002	152.54	.002	.002	.002	122.82
9														
10														

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	2	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
2	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
3	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
4	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
5	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
6	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
7	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
8	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
9	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
10	.667	.157	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050

*** STABILITY PARAMETER

* XI = -.3756

ORIGINAL PAGE IS
OF GOOD QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BEAD DATA, WALL STATIONS

FILE 12U ALPHA-MCL = 6.0 PPP RUN-PT 35.73
RUN 25 ALPHA-RAP = 5.0 C-COMP = 317.4
POINT 1 SIGMA = 135. V-DEF = 197.67
COMPUTED FREQUENCY = 9.14, K = .0726

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	962-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	1	-1.0000	-1.0000	-1.0000	-1.0000	-1.0000	-1.0000	-1.0000	-1.0000
2	2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
9	9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

X	N	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	962-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG
1	1	-1.0000	-1.0000	-1.0000	-1.0000	-1.0000	-1.0000	-1.0000	-1.0000
2	2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
9	9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MODE 1 -- OCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 129 ALPHA-MCL = 6.0 POP RUN-FT 25.13
 RUN 25 ALPHA-BAR = .5 Q-COMP = .31784
 POINT 1 SIGMA = .135 V-REF = .197.67
 COMPUTED FREQUENCY = 9.14. K = .0726

FOURIER COEFFICIENTS, AMPLITUDE AND
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	13	1.161	187.13	7.009	175.79	4.849	170.19	3.737	163.13	3.573	155.67	3.803	150.30
2	1	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51
3	4	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51
4	5	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51
5	4	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51
6	5	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51
7	4	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51
8	5	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51
9	4	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51
10	5	1.386	235.40	2.011	203.23	2.072	203.16	2.120	204.44	2.099	204.51	2.120	204.51

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	3	3.174	144.78	2.934	142.82	2.732	140.78	2.414	134.77	4.855	135.91	3.866	136.84
2	2	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37
3	4	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37
4	5	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37
5	4	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37
6	5	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37
7	4	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37
8	5	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37
9	4	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37
10	5	1.123	203.16	2.270	204.56	2.268	203.80	2.096	198.07	2.132	203.60	2.124	201.37

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
2	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
3	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
4	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
5	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
6	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
7	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
8	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
9	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56
10	1	1.892	64.75	1.952	80.60	1.567	88.19	1.851	121.65	1.759	135.87	1.937	155.56

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 129 ALPHA-MCL = 6.0 POP RUN-PT 25.73
RUY 125 ALPHA-PAR = 3.5 9-COMP = 31.98
POINT 1 SIGMA = 135. V-DEF = 197.67
COMPUTED FREQUENCY = 9.14, K = .0726

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCP ⁷¹²	DELCP ⁵²	DELCP ¹⁴⁸	DELCP ²⁶¹	DELCP ³⁹²	DELCP ⁵³⁰	DELCP ⁶⁶¹
1	26.773	11.718	7.863	5.427	1.079	3.639	3.129
2	-1.736	-1.335	-0.515	-0.324	-0.063	-0.084	-0.015
3	-1.375	-1.120	-0.473	-0.104	-0.013	-0.015	-0.005
4	-1.145	-0.923	-0.331	-0.038	-0.013	-0.016	-0.005
5	-0.919	-0.775	-0.241	-0.022	-0.015	-0.012	-0.004
6	-0.743	-0.622	-0.164	-0.011	-0.015	-0.012	-0.004
7	-0.619	-0.522	-0.114	-0.008	-0.015	-0.012	-0.004
8	-0.543	-0.454	-0.084	-0.006	-0.015	-0.012	-0.004
9	-0.494	-0.416	-0.064	-0.004	-0.015	-0.012	-0.004
10	-0.454	-0.377	-0.045	-0.003	-0.015	-0.012	-0.004

N	DELCP ⁷⁷⁴	DELCP ⁸⁶⁶	DELCP ⁹¹⁰	N	CMREAL	CMIMAG
1	1.625	1.783	1.743	1	1.062	0.281
2	-1.196	-1.348	-1.277	2	-0.119	-0.004
3	-1.012	-1.156	-1.039	3	-0.007	-0.003
4	-0.844	-0.973	-0.835	4	-0.006	-0.006
5	-0.727	-0.833	-0.714	5	-0.001	-0.001
6	-0.647	-0.733	-0.639	6	-0.001	-0.001
7	-0.599	-0.667	-0.599	7	-0.001	-0.001
8	-0.572	-0.622	-0.572	8	-0.001	-0.001
9	-0.554	-0.599	-0.554	9	-0.001	-0.001
10	-0.543	-0.584	-0.543	10	-0.001	-0.001

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10
1	1.193	2.743	2.06	2.823	7.423
2	-2.680	-2.773	-1.74	-1.437	-2.505
3	-1.493	-1.467	-1.67	-1.437	-2.505
4	-1.493	-1.467	-1.67	-1.437	-2.505
5	-1.493	-1.467	-1.67	-1.437	-2.505
6	-1.493	-1.467	-1.67	-1.437	-2.505
7	-1.493	-1.467	-1.67	-1.437	-2.505
8	-1.493	-1.467	-1.67	-1.437	-2.505
9	-1.493	-1.467	-1.67	-1.437	-2.505
10	-1.493	-1.467	-1.67	-1.437	-2.505

*** STABILITY PARAMETER

* XI = -.2806

ORIGINAL
OF POOR QUALITY

ORIGINAL RECORD
OF POOR QUALITY

OCMI PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 129 ALPHA-MCL = 6.5 PDP RUN-PT 25.03
RUN 125 ALPHA-BAR = 31.84
POINT 1 Q-COMP = 197.67
COMPUTED FREQUENCY = 9.14, K = .0726
V-REF = 197.67
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	27.287	10.28	11.269	12.14	8.008	10.72	5.546	17.88	4.073	3.477
2	1.798	282.72	206.91	17.09	0.084	150.29	0.034	172.12	0.031	170.23
3	1.798	238.91	0.85	17.09	0.084	150.29	0.034	172.12	0.031	170.23
4	1.798	238.91	0.85	17.09	0.084	150.29	0.034	172.12	0.031	170.23
5	1.798	238.91	0.85	17.09	0.084	150.29	0.034	172.12	0.031	170.23
6	1.798	238.91	0.85	17.09	0.084	150.29	0.034	172.12	0.031	170.23
7	1.798	238.91	0.85	17.09	0.084	150.29	0.034	172.12	0.031	170.23
8	1.798	238.91	0.85	17.09	0.084	150.29	0.034	172.12	0.031	170.23
9	1.798	238.91	0.85	17.09	0.084	150.29	0.034	172.12	0.031	170.23
10	1.798	238.91	0.85	17.09	0.084	150.29	0.034	172.12	0.031	170.23

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	N	CN-MAG	PHIN	N	CN-MAG	PHIN
	1	1.726	347.57	1.214	333.17	0.835	332.88	1	895	5.74	1	028	14.80
	2	1.726	347.57	1.214	333.17	0.835	332.88	2	895	5.74	2	028	14.80
	3	1.726	347.57	1.214	333.17	0.835	332.88	3	895	5.74	3	028	14.80
	4	1.726	347.57	1.214	333.17	0.835	332.88	4	895	5.74	4	028	14.80
	5	1.726	347.57	1.214	333.17	0.835	332.88	5	895	5.74	5	028	14.80
	6	1.726	347.57	1.214	333.17	0.835	332.88	6	895	5.74	6	028	14.80
	7	1.726	347.57	1.214	333.17	0.835	332.88	7	895	5.74	7	028	14.80
	8	1.726	347.57	1.214	333.17	0.835	332.88	8	895	5.74	8	028	14.80
	9	1.726	347.57	1.214	333.17	0.835	332.88	9	895	5.74	9	028	14.80
	10	1.726	347.57	1.214	333.17	0.835	332.88	10	895	5.74	10	028	14.80

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
GAP FRACTION	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
1	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
2	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
3	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
4	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
5	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
6	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
7	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
8	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
9	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288
10	2.362	64.47	3.258	173.84	16.288	16.288	16.288	16.288	16.288	16.288

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 123 ALPHA-WCL = 6.7 PWP RUM.PI 35.655
RUN 123 ALPHA-WCL = 6.7 C-COMP = 32.150
POINT 3 SIGMA = 1.15 V-REF = 198.84
COMPUTED FREQUENCY = 15.52, K = .1224

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	262-UPPER	CPREAL	CPIMAG	148-UPPER	CPREAL	CPIMAG	261-UPPER	CPREAL	CPIMAG	392-UPPER	CPREAL	CPIMAG	SIN-UPPER	CPREAL	CPIMAG	261-UPPER	CPREAL	CPIMAG
1	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
2	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
3	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
4	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
5	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
6	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
7	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
8	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
9	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
10	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3

X	N	CPREAL	CPIMAG	262-UPPER	CPREAL	CPIMAG	148-UPPER	CPREAL	CPIMAG	261-UPPER	CPREAL	CPIMAG	392-UPPER	CPREAL	CPIMAG	SIN-UPPER	CPREAL	CPIMAG	261-UPPER	CPREAL	CPIMAG
1	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
2	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
3	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
4	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
5	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
6	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
7	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
8	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
9	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
10	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3

X	N	CPREAL	CPIMAG	262-UPPER	CPREAL	CPIMAG	148-UPPER	CPREAL	CPIMAG	261-UPPER	CPREAL	CPIMAG	392-UPPER	CPREAL	CPIMAG	SIN-UPPER	CPREAL	CPIMAG	261-UPPER	CPREAL	CPIMAG
1	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
2	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
3	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
4	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
5	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
6	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
7	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
8	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
9	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3
10	-17	273	-2	349	-7	286	-1	135	-5	246	-9	272	-3	820	-7	298	-3	574	-3	574	-3

100% PERIODICITY TEST

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

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FILE 122 ALPHA=CL = 6.0 PTP RUN.PI = 35.125
RUN 35 ALPHA=RA = 13.5 Q-COMP = 32.125
POINT 35 SIGMA = 13.5 V-REF = 198.82
COMPUTED FREQUENCY = 15.50 K = 124

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FOURIER COEFFICIENTS, REAL & IMAGINARY COMPONENTS

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

[illegible][illegible]

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.
CAP FACTION

121

●

125.

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157

$$\text{XI} = -0.2171$$

ORIGINAL IMAGE IN
OF POOR QUALITY.

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 122 ALPHA-MOL = 6.0 PCP RUN-PI 25.05
 RUN 23 ALPHA-BL = 13.5 C-COMP = 32.156
 POINT SIGMA = 135.0 V-REF = 338.84
 COMPUTED FREQUENCY = 15.5C, K = .1224

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	24.563	6.69	11.395	11.53	7.993	19.73	5.473	19.74	4.202	3.62	3.616	2.14
2	3.16	211.82	333.77	333.77	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12
3	190	165.37	82.34	82.34	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12
4	190	165.37	82.34	82.34	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12
5	190	165.37	82.34	82.34	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12
6	190	165.37	82.34	82.34	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12
7	190	165.37	82.34	82.34	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12
8	190	165.37	82.34	82.34	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12
9	190	165.37	82.34	82.34	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12
10	190	165.37	82.34	82.34	8.664	350.12	8.664	350.12	8.664	350.12	8.664	350.12

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
2	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
3	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
4	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
5	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
6	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
7	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
8	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
9	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61
10	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61	920	353.61

*** STABILITY PARAMETER

W1 W2 W3 W4 W5 W6 W7 W8 W9 W10
 CP-MAG CP-MAG CP-MAG CP-MAG CP-MAG CP-MAG CP-MAG CP-MAG CP-MAG CP-MAG
 PHI PHI PHI PHI PHI PHI PHI PHI PHI PHI
 XI = -2371

*** WALL PRESSURES, PER RADIAN ***

WALL MO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
GAP FRACTION	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG	CP-MAG
1	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
2	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
3	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
4	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
5	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
6	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
7	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
8	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
9	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61
10	1.744	353.61	980	353.61	920	353.61	920	353.61	920	353.61

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 124 ALPHA-PCL = 6.0 PDP RUN.PT 25.07
RUM 25 ALPHA-BAR = .5 C-COMP = 32.98
POINT 5 SIGMA = 135. V-REF = 198.97
COMPUTED FREQUENCY = 19.12, K = .1510
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1.525	186.03	7.559	121.72	5.379	180.28	4.190	179.77	3.853	174.74
2	1.293	120.43	4.447	27.59	5.518	134.64	5.130	139.23	3.961	139.33
3	1.279	357.76	1.108	192.26	1.112	185.93	0.666	158.12	0.733	150.79
4	1.059	154.61	1.149	156.26	1.161	154.30	1.139	158.34	0.745	150.79
5	1.162	4.75	0.588	27.40	0.590	134.35	0.333	52.08	0.422	156.38
6	0.875	218.61	0.421	157.63	0.458	141.33	0.441	125.78	0.493	131.58
7	0.899	251.48	0.771	82.46	0.563	80.94	0.057	82.87	0.057	86.04
8	0.863	251.25	0.723	298.73	0.712	329.70	0.017	15.84	0.011	29.90
9	0.867	251.25	0.731	176.77	0.715	107.23	0.014	77.84	0.011	62.04
10	0.868	312.03	0.742	299.41	0.741	298.46	0.042	305.08	0.034	312.56

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	3.363	165.71	2.966	167.77	2.739	166.61	2.588	13.09	3.027	31.32
2	3.562	115.57	3.264	137.80	3.548	137.32	3.094	42.84	3.259	102.30
3	1.120	173.75	1.119	186.63	1.119	173.36	1.125	186.17	1.471	191.84
4	0.660	130.94	0.342	160.59	0.350	171.97	0.488	186.11	0.277	137.53
5	0.620	130.94	0.359	131.18	0.352	134.78	0.072	176.57	0.057	199.34
6	0.614	62.78	0.368	72.70	0.354	74.39	0.013	129.74	0.028	53.80
7	0.621	33.34	0.329	64.25	0.312	65.39	0.042	62.47	0.021	80.87
8	0.640	306.19	0.551	303.80	0.543	306.34	0.038	301.75	0.017	345.15
9							0.040	301.28	0.065	306.15
10										

N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1.028	72.88	1.145	137.46	1.339	123.50	1.792	153.27	1.797	161.67
2	1.222	182.58	1.031	141.90	1.034	147.80	1.336	153.91	1.401	152.55
3	1.046	106.88	0.517	181.36	0.520	190.84	0.156	157.19	1.199	189.74
4	0.816	116.39	0.445	170.58	0.445	171.34	0.159	181.53	0.431	146.55
5	0.814	72.39	0.441	120.58	0.441	130.88	0.059	159.40	0.046	145.19
6	0.813	319.56	0.410	92.30	0.410	62.52	0.019	170.86	0.015	172.26
7			0.414	26.74	0.418	26.75	0.013	87.86	0.026	93.88
8							0.043	332.04		
9										
10										

ORIGINAL NAME IS
OF POOR QUALITY,

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 124 ALPHA-MCL = 6.0 PDP RUN-PI 25.07
RUN 125 ALPHA-RAR = 32.198
POINT 125 Q-COMP = 198.97
COMPUTED FREQUENCY = 19.12, N = 1510
V-REF = 198.97

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	012			062			148			261			392			510			661		
	N	DELCPH	PHI	N	DELCPH	PHI	N	DELCPH	PHI	N	DELCPH	PHI	N	DELCPH	PHI	N	DELCPH	PHI	N	DELCPH	PHI
1	27	028	8.02	11	000	17.07	8	124	13.33	5	541	13.58	4	261	9.34	3	643	7.34	1	091	12.92
3	157	152.62	121.95	145	145	35.02	124	124	13.33	5	541	13.58	4	261	9.34	3	643	7.34	1	091	12.92
5	238	180.52	157.07	071	071	261.74	062	062	13.33	5	541	13.58	4	261	9.34	3	643	7.34	1	091	12.92
7	138	237.07	157.07	053	053	261.74	062	062	13.33	5	541	13.58	4	261	9.34	3	643	7.34	1	091	12.92
9	175	267.30	157.07	049	049	261.74	062	062	13.33	5	541	13.58	4	261	9.34	3	643	7.34	1	091	12.92
10	030	148.72	157.07	033	033	261.74	062	062	13.33	5	541	13.58	4	261	9.34	3	643	7.34	1	091	12.92

X =	774			860			910			N	CN-MAG			PHIN	N	CM-MAG			PHIM
	N	DELCPH	PHI	N	DELCPH	PHI	N	DELCPH	PHI		#	N	DELCPH			PHI	N	DELCPH	
1	674	1.16	1.16	5	1.26	1.16	967	356.75	9.04	1	091	12.92	1	091	12.92	1	091	12.92	
3	127	1.01	1.01	1	0.73	1.01	105	372.63	37.65	3	018	12.08	3	018	12.08	3	018	12.08	
5	035	1.51	1.51	3	0.15	1.51	016	316.96	212.04	5	036	208.95	5	036	208.95	5	036	208.95	
7	028	1.53	1.53	0	0.09	1.53	013	3274.87	362.93	7	027	282.03	7	027	282.03	7	027	282.03	
9	013	1.02	1.02	0	0.10	1.02	007	345.45	242.63	9	017	396.63	9	017	396.63	9	017	396.63	
10	008	1.16	1.16	0	0.13	1.16	009	355.20	224.50	10	015	224.50	10	015	224.50	10	015	224.50	
12	019	1.47	1.47	0	0.33	1.47	029	384.14	289.41	12	029	289.41	12	029	289.41	12	029	289.41	

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	W1			W2			W4			W6			W10			W125			XI		
	N	CP-MAG	PHI	N	CP-MAG	PHI	N	CP-MAG	PHI	N	CP-MAG	PHI	N	CP-MAG	PHI	N	CP-MAG	PHI	N	CP-MAG	PHI
1	1.443	72.63	33.03	1.907	26.20	20.13	16.758	12.08	12.08	3.615	173.66	66.66	10.902	12.08	12.08	10.902	12.08	12.08	10.902	12.08	12.08
3	1.800	142.97	162.72	1.117	175.07	175.07	370.33	222.92	222.92	0.070	173.66	15.15	10.902	12.08	12.08	10.902	12.08	12.08	10.902	12.08	12.08
5	1.443	72.63	33.03	1.907	26.20	20.13	16.758	12.08	12.08	3.615	173.66	66.66	10.902	12.08	12.08	10.902	12.08	12.08	10.902	12.08	12.08
7	1.800	142.97	162.72	1.117	175.07	175.07	370.33	222.92	222.92	0.070	173.66	15.15	10.902	12.08	12.08	10.902	12.08	12.08	10.902	12.08	12.08
9	1.443	72.63	33.03	1.907	26.20	20.13	16.758	12.08	12.08	3.615	173.66	66.66	10.902	12.08	12.08	10.902	12.08	12.08	10.902	12.08	12.08
10	1.800	142.97	162.72	1.117	175.07	175.07	370.33	222.92	222.92	0.070	173.66	15.15	10.902	12.08	12.08	10.902	12.08	12.08	10.902	12.08	12.08

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 132 ALPHA-WCL = 6.5 PTP RUN-PT 27.89
 RUN 27 ALPHA-PAB = 18.5 C-COMP = 22.89
 POINT 1 SIGMA = 18.5 VREF = 22.89
 FOURIER COEFFICIENTS, REAL & IMAGINARY
 *** BLADE PRESSURES, PER RADIAN ***

X = 012-UPPER CPREAL CPIMAG 062-UPPER CPREAL CPIMAG 148-UPPER CPREAL CPIMAG 261-UPPER CPREAL CPIMAG 392-UPPER CPREAL CPIMAG 510-UPPER CPREAL CPIMAG 661-UPPER CPREAL CPIMAG

1	-19.857	1.295	-5.439	1.212	-2.970	-6.92	-1.673	-1.175	-1.072	-8.30	-9.27
2	1.295	1.349	-5.439	-4.122	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
3	1.349	1.371	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
4	1.371	1.393	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
5	1.393	1.415	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
6	1.415	1.437	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
7	1.437	1.459	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
8	1.459	1.481	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
9	1.481	1.503	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
10	1.503	1.525	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27

X = 012-UPPER CPREAL CPIMAG 062-UPPER CPREAL CPIMAG 148-UPPER CPREAL CPIMAG 261-UPPER CPREAL CPIMAG 392-UPPER CPREAL CPIMAG 510-UPPER CPREAL CPIMAG 661-UPPER CPREAL CPIMAG

1	-19.857	1.295	-5.439	1.212	-2.970	-6.92	-1.673	-1.175	-1.072	-8.30	-9.27
2	1.295	1.349	-5.439	-4.122	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
3	1.349	1.371	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
4	1.371	1.393	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
5	1.393	1.415	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
6	1.415	1.437	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
7	1.437	1.459	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
8	1.459	1.481	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
9	1.481	1.503	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
10	1.503	1.525	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27

X = 012-UPPER CPREAL CPIMAG 062-UPPER CPREAL CPIMAG 148-UPPER CPREAL CPIMAG 261-UPPER CPREAL CPIMAG 392-UPPER CPREAL CPIMAG 510-UPPER CPREAL CPIMAG 661-UPPER CPREAL CPIMAG

1	-19.857	1.295	-5.439	1.212	-2.970	-6.92	-1.673	-1.175	-1.072	-8.30	-9.27
2	1.295	1.349	-5.439	-4.122	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
3	1.349	1.371	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
4	1.371	1.393	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
5	1.393	1.415	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
6	1.415	1.437	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
7	1.437	1.459	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
8	1.459	1.481	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
9	1.481	1.503	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27
10	1.503	1.525	-5.439	-5.444	-3.358	-4.474	-3.324	-1.582	-1.072	-8.30	-9.27

POOR QUALITY

OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 132 ALPHA-MCL = 6.0 PDP RUN.PI 27.04
 RUN 27 ALPHA-RAR = 18.5 Q-COMP = 328.36
 POINT 1 SIGMA = 18.5 V-REF = 200.02
 COMPUTED FREQUENCY = 9.36, K = .0709
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI				
1	19	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
2	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
3	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
4	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
5	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
6	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
7	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
8	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
9	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03
10	1	.972	176.27	5	.496	184.34	3	.043	192.57	1	.830	203.85	22	1.447	222.17	1.260	229.03

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
2	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
3	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
4	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
5	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
6	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
7	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
8	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
9	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
10	1	.967	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI				
1	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
2	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
3	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
4	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
5	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
6	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
7	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
8	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
9	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03
10	1	.974	247.04	9	.160	226.68	7	.270	224.99	1	.830	203.85	22	1.447	222.17	1.260	229.03

COPIES 1 -- CENTRAL DATA, WALL STATIONS

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172 ALPHA=CL = 4.0 PFC MON.PI = 27.39
173 ALPHA=AS = 5.0 C-CONF = 226.02
174 ALPHA=AS = 10.0 V-DEF = 37.02
175 COMPUFID FREQUENCY = 0.06, K = 0.009
REAL & IMAGINARY FORCE, AND MOMENT, PEP DATING ***
REAL & IMAGINARY FORCE, AND MOMENT, PEP DATING ***

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FOURIER COEFFICIENTS, REAL & IMAGINARY
***BLADE PRESSURES, NORMAL FORCE, AND
MOMENT, PER RADIUS ***

[illegible]

X =	°774		°56C		°910		N	CNREAL	CNIPAG	W	CNREAL	CNIMAG
	DELCP2	DELCP1	DELCP2	DELCP1	DELCP2	DELCP1						
1	2.641	372	1.339	779	1.332	549	1	5.594	124	1	1.373	-0.979
2	1.641	372	1.337	779	1.330	549	2	5.340	124	2	1.373	-0.936
3	1.377	376	1.324	779	1.320	549	3	5.229	124	3	1.373	-0.883
4	1.177	376	1.319	779	1.312	549	4	5.119	124	4	1.373	-0.830
5	1.046	374	1.315	779	1.307	549	5	5.018	124	5	1.373	-0.777
6	0.946	372	1.312	779	1.304	549	6	4.916	124	6	1.373	-0.724
7	0.869	372	1.309	779	1.301	549	7	4.821	124	7	1.373	-0.671
8	0.816	376	1.307	779	1.299	549	8	4.731	124	8	1.373	-0.618
9	0.779	376	1.305	779	1.297	549	9	4.641	124	9	1.373	-0.565
10	0.749	376	1.303	779	1.295	549	10	4.551	124	10	1.373	-0.512

*** STABILITY PARAMETER

XI = .3787

Wavelength (nm)	W1 CPREAL	W2 CPREAL	W3 CPREAL	W4 CPREAL	W5 CPREAL	W6 CPREAL	W7 CPREAL	W8 CPREAL	W9 CPREAL	W10 CPREAL
400	0.672	0.733	0.838	1.026	1.182	1.349	1.521	1.698	1.873	2.045
420	0.769	0.833	0.948	1.136	1.292	1.459	1.631	1.808	1.983	2.155
440	0.843	0.907	1.022	1.210	1.366	1.533	1.705	1.882	2.057	2.229
460	0.893	0.957	1.072	1.260	1.416	1.583	1.755	1.932	2.107	2.279
480	0.928	0.993	1.108	1.296	1.452	1.619	1.791	1.968	2.143	2.315
500	0.953	1.017	1.132	1.320	1.476	1.643	1.815	1.992	2.167	2.339
520	0.970	1.035	1.150	1.338	1.494	1.661	1.833	2.010	2.185	2.357
540	0.980	1.045	1.160	1.348	1.504	1.671	1.843	2.020	2.195	2.367
560	0.986	1.051	1.166	1.354	1.510	1.677	1.849	2.026	2.201	2.373
580	0.989	1.054	1.169	1.357	1.513	1.680	1.851	2.028	2.203	2.375
600	0.991	1.056	1.171	1.359	1.515	1.682	1.853	2.030	2.205	2.377
620	0.992	1.057	1.172	1.360	1.516	1.683	1.854	2.031	2.206	2.378
640	0.993	1.058	1.173	1.361	1.517	1.684	1.855	2.032	2.207	2.379
660	0.994	1.059	1.174	1.362	1.518	1.685	1.856	2.033	2.208	2.380
680	0.995	1.060	1.175	1.363	1.519	1.686	1.857	2.034	2.209	2.381
700	0.996	1.061	1.176	1.364	1.520	1.687	1.858	2.035	2.210	2.382
720	0.997	1.062	1.177	1.365	1.521	1.688	1.859	2.036	2.211	2.383
740	0.998	1.063	1.178	1.366	1.522	1.689	1.860	2.037	2.212	2.384
760	0.999	1.064	1.179	1.367	1.523	1.690	1.861	2.038	2.213	2.385
780	0.999	1.065	1.180	1.368	1.524	1.691	1.862	2.039	2.214	2.386
800	1.000	1.066	1.181	1.369	1.525	1.692	1.863	2.040	2.215	2.387

*** ALL PRESIDENTS ***

WALL NO. 101	WALL NO. 102	WALL NO. 103	WALL NO. 104	WALL NO. 105	WALL NO. 106	WALL NO. 107	WALL NO. 108	WALL NO. 109	WALL NO. 110	WALL NO. 111	WALL NO. 112	WALL NO. 113	WALL NO. 114	WALL NO. 115	WALL NO. 116	WALL NO. 117	WALL NO. 118	WALL NO. 119	WALL NO. 120	WALL NO. 121	WALL NO. 122	WALL NO. 123	WALL NO. 124	WALL NO. 125	WALL NO. 126	WALL NO. 127	WALL NO. 128	WALL NO. 129	WALL NO. 130	WALL NO. 131	WALL NO. 132	WALL NO. 133	WALL NO. 134	WALL NO. 135	WALL NO. 136	WALL NO. 137	WALL NO. 138	WALL NO. 139	WALL NO. 140	WALL NO. 141	WALL NO. 142	WALL NO. 143	WALL NO. 144	WALL NO. 145	WALL NO. 146	WALL NO. 147	WALL NO. 148	WALL NO. 149	WALL NO. 150	WALL NO. 151	WALL NO. 152	WALL NO. 153	WALL NO. 154	WALL NO. 155	WALL NO. 156	WALL NO. 157	WALL NO. 158	WALL NO. 159	WALL NO. 160	WALL NO. 161	WALL NO. 162	WALL NO. 163	WALL NO. 164	WALL NO. 165	WALL NO. 166	WALL NO. 167	WALL NO. 168	WALL NO. 169	WALL NO. 170	WALL NO. 171	WALL NO. 172	WALL NO. 173	WALL NO. 174	WALL NO. 175	WALL NO. 176	WALL NO. 177	WALL NO. 178	WALL NO. 179	WALL NO. 180	WALL NO. 181	WALL NO. 182	WALL NO. 183	WALL NO. 184	WALL NO. 185	WALL NO. 186	WALL NO. 187	WALL NO. 188	WALL NO. 189	WALL NO. 190	WALL NO. 191	WALL NO. 192	WALL NO. 193	WALL NO. 194	WALL NO. 195	WALL NO. 196	WALL NO. 197	WALL NO. 198	WALL NO. 199	WALL NO. 200
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 137 ALPHA-MCL = 6.0 POP RUN PT 27.04
RUN 1 ALPHA-RAR = 18.5 C-COMP = 32.836
POINT 1 SIGMA = 18.3 V-REF = 209.92
COMPUTED FREQUENCY = 9.06 K = .0739
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	32.245	357.29	12.687	359.94	9.058	359.35	6.391	359.91	4.527	359.91	3.704	359.91	2.977	359.91
2	26.66	202.93	12.069	341.95	1.119	323.75	0.015	299.91	0.011	299.91	13.94	15.94	0.069	297.01
3	27.71	130.86	0.065	347.80	0.035	253.62	0.029	19.05	0.026	173.67	110.07	150.07	0.031	139.66
4	27.71	130.86	0.059	347.80	0.042	253.62	0.021	19.05	0.054	211.91	173.67	210.07	0.016	139.66
5	27.71	130.86	0.066	347.80	0.042	253.62	0.021	19.05	0.054	211.91	173.67	210.07	0.016	139.66
6	27.71	130.86	0.066	347.80	0.042	253.62	0.021	19.05	0.054	211.91	173.67	210.07	0.016	139.66
7	27.71	130.86	0.066	347.80	0.042	253.62	0.021	19.05	0.054	211.91	173.67	210.07	0.016	139.66
8	27.71	130.86	0.066	347.80	0.042	253.62	0.021	19.05	0.054	211.91	173.67	210.07	0.016	139.66
9	27.71	130.86	0.066	347.80	0.042	253.62	0.021	19.05	0.054	211.91	173.67	210.07	0.016	139.66
10	27.71	130.86	0.066	347.80	0.042	253.62	0.021	19.05	0.054	211.91	173.67	210.07	0.016	139.66

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.195	9.76	1.039	306.98	1.124	26.95	1.124	26.95	1.124	26.95	1.124	26.95	1.124	26.95
2	1.110	316.20	0.334	141.11	0.045	93.83	0.045	93.83	0.045	93.83	0.045	93.83	0.045	93.83
3	0.416	253.08	0.077	177.07	0.026	298.41	0.026	298.41	0.026	298.41	0.026	298.41	0.026	298.41
4	0.051	160.89	0.010	159.80	0.008	201.34	0.008	201.34	0.008	201.34	0.008	201.34	0.008	201.34
5	0.019	150.89	0.005	159.80	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34
6	0.012	121.13	0.005	159.80	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34
7	0.012	121.13	0.005	159.80	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34
8	0.012	121.13	0.005	159.80	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34
9	0.012	121.13	0.005	159.80	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34
10	0.012	121.13	0.005	159.80	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34	0.005	201.34

*** STABILITY PARAMETER

* XI = .0797 *
S *****

WALL NO.	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
GAP FRACTION	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	4.762	348.87	1.125	348.87	1.125	348.87	1.125	348.87	1.125	348.87	1.125	348.87	1.125	348.87
2	3.816	246.09	0.000	246.09	0.000	246.09	0.000	246.09	0.000	246.09	0.000	246.09	0.000	246.09
3	0.551	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70
4	0.551	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70
5	0.551	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70
6	0.551	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70
7	0.551	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70
8	0.551	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70
9	0.551	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70
10	0.551	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70	0.000	113.70

*** WALL PRESSURES, PER RADIAN ***

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MODE 1 -- OCUT PERIODICITY TEST
          CENTER BLADE 5574, WALL STATIONS
134 ALPHA-MOL = 6.5 PDP RUN.PI 237736
127 ALPHA-RAR = 5.5 C-COMP = 297736
3 SIGMA = 18.5 V-REF = 297736
COMPUTED FREQUENCY = 15.44, M = 1238
IMAGINARY
E IAN 001

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FOURIER COEFFICIENTS, REAL & IMAGIN ***
*** BLADE PRESSURES, PER RADIAN ***[illegible][illegible][illegible]

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 134 ALPHA-MCL = 6.0 PDP RUN-PI 22760
RUN 27 ALPHA-BAR = 180.0 O-COMP = 22760
POINT 3 ALPHA-SIGMA = 180.0 V-REF = 200.69
COMPUTED FREQUENCY = 15.44, K = .1208
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
2	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
3	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
4	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
5	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
6	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
7	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
8	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
9	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95
10	19.25	176.90	7.80	178.92	5.32	182.67	4.19	186.16	3.06	190.05	1.91	193.95

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
2	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
3	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
4	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
5	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
6	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
7	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
8	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
9	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45
10	3.51	197.57	3.92	192.54	2.81	191.48	1.98	186.01	1.35	180.73	0.85	175.45

X	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
2	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
3	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
4	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
5	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
6	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
7	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
8	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
9	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57
10	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57	5.50	197.57

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 137 ALPHA-MAG = 6.8 PDP RUNPT = 27.08
RUN POINT 3 ALPHA-MAG = 18.0 G-COMP = 32.63
COMPUTED FREQUENCY = 15.44, K = 1208
V-REF = 200.69
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	28.351	356.00	11.872	1.78	8.397	280.18	5.1	123	292.98	3.46	163.17	4.633
2	41.17	322.46	0.38	322.60	0.06	320.55	0.024	292.98	0.025	123.17	0.025	163.17
3	250	322.46	0.01	181.69	0.02	284.76	0.024	320.55	0.025	123.17	0.025	163.17
4	268	151.06	0.01	138.95	0.04	209.99	0.026	245.40	0.03	194.94	0.014	254.75
5	155	8.92	0.02	62.40	0.02	136.31	0.020	172.81	0.019	218.94	0.025	239.26
6	299	251.59	0.03	358.95	0.018	346.36	0.016	339.17	0.019	254.75	0.025	239.26
7	251	240.93	0.03	256.95	0.018	346.36	0.016	339.17	0.019	254.75	0.025	239.26
8	240	197.51	0.01	197.51	0.009	135.88	0.011	75.66	0.023	168.58	0.021	174.54
9												
10												

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.137	17.47	1.087	20.50	1.473	15.83	1.1	298	274.06	3.33	1.100	157.61
2	137	242.18	0.33	177.95	0.02	141.76	0.023	274.06	0.026	229.06	0.001	157.61
3	355	330.38	0.02	260.76	0.019	117.81	0.023	274.06	0.026	229.06	0.001	157.61
4	330	187.92	0.03	156.38	0.009	111.02	0.023	274.06	0.026	229.06	0.001	157.61
5	302	258.26	0.04	110.58	0.018	156.23	0.023	274.06	0.026	229.06	0.001	157.61
6	273	33.88	0.02	58.50	0.006	220.37	0.023	274.06	0.026	229.06	0.001	157.61
7	323	323.88	0.07	312.26	0.009	255.37	0.023	274.06	0.026	229.06	0.001	157.61
8	323	194.00	0.07	312.26	0.009	255.37	0.023	274.06	0.026	229.06	0.001	157.61
9												
10												

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	989	335.50	2.677	348.95	16.911	178.81	3.728	188.97	10.235	356.01	3.539	157.61
2	1227	344.21	1.139	319.68	1.047	304.89	1.123	35.48	1.462	30.15	0.021	157.61
3	271	4.21	2.264	10.79	4.237	198.81	2.44	35.48	2.322	1.07	0.021	157.61
4	169	158.19	1.20	134.08	2.21	148.24	1.52	161.25	1.887	125.58	0.021	157.61
5	1087	351.89	1.087	224.55	0.089	66.60	1.01	27.02	0.076	287.80	0.021	157.61
6	1009	31.14	0.087	25.85	0.089	213.39	0.066	27.02	0.076	287.80	0.021	157.61
7	1009	31.14	0.087	25.85	0.089	213.39	0.066	27.02	0.076	287.80	0.021	157.61
8	1009	31.14	0.087	25.85	0.089	213.39	0.066	27.02	0.076	287.80	0.021	157.61
9	1009	31.14	0.087	25.85	0.089	213.39	0.066	27.02	0.076	287.80	0.021	157.61
10	1009	31.14	0.087	25.85	0.089	213.39	0.066	27.02	0.076	287.80	0.021	157.61

*** STABILITY PARAMETER

* XI = .0460

OCW PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 136 ALPHA-WCL = 6.0 PDP RUN-PT 27.28
RUN 27 ALPHA-RAP = .5 Q-COMP = .3716
POINT 5 SIGMA = 18.0 W-REF = 20.65
COMPUTED FREQUENCY = 10.76, K = .1493
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	-19	.497	1.908	-.737	-.663	-.549	-.294	-.179
2	3	.317	1.668	-.329	-.122	-.047	-.157	-.154
3	4	.376	1.275	-.334	-.094	-.075	-.105	-.028
4	5	.373	1.081	-.347	-.053	-.072	-.058	-.047
5	6	.279	.877	-.378	-.033	-.061	-.034	-.046
6	7	.226	.673	-.377	-.013	-.043	-.015	-.028
7	8	.177	.478	-.350	-.016	-.022	-.035	-.008
8	9	.117	.293	-.322	-.019	-.042	-.019	-.022
9	10	.056	.135	-.211	-.035	-.041	-.036	-.001
10	11	.006	.021	-.077	-.075	-.024	-.023	-.025

X	N	774-UPPER CPREAL CPIMAG	860-UPPER CPREAL CPIMAG	910-UPPER CPREAL CPIMAG	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG
1	-3	.653	1.671	-.154	-.845	4.335	2.888	1.472
2	3	.316	1.056	-.045	-.012	-.017	-.150	-.131
3	4	.342	.832	-.038	-.027	-.023	-.034	-.011
4	5	.242	.617	-.017	-.024	-.023	-.020	-.018
5	6	.191	.414	-.013	-.011	-.019	-.026	-.037
6	7	.134	.239	-.017	-.005	-.003	-.011	-.013
7	8	.074	.111	-.025	-.026	-.002	-.004	-.005
8	9	.024	.058	-.035	-.030	-.013	-.022	-.001
9	10	.004	.028	-.035	-.070	-.006	-.002	-.012

X	N	032-LOWER CPREAL CPIMAG	037-LOWER CPREAL CPIMAG	068-LOWER CPREAL CPIMAG	079-LOWER CPREAL CPIMAG	080-LOWER CPREAL CPIMAG	091-LOWER CPREAL CPIMAG
1	-3	.403	.980	-.174	-.101	-2.293	-1.578
2	3	.196	.629	-.091	-.022	-.032	-.061
3	4	.157	.459	-.059	-.050	-.053	-.051
4	5	.100	.328	-.039	-.038	-.053	-.055
5	6	.057	.200	-.026	-.024	-.033	-.044
6	7	.030	.122	-.019	-.016	-.033	-.039
7	8	.013	.065	-.012	-.017	-.025	-.028
8	9	.004	.038	-.008	-.012	-.023	-.021
9	10	.001	.021	-.005	-.007	-.001	-.003

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 136 ALPHA-MCL = 6.0 PBP RUN.PI 32708
 RUN 27 ALPHA-RAR = 18.5 Q-COMP = 32719
 POINT 5 SIGMA = 18.3 V-CREF = 200.05
 COMPUTED FREQUENCY = 19.06 K = .1493
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	
1	19	589	179.41	7	769	175.19	5	557	176.97	4	332	179.38	301	185.96
2	1	458	323.10	8	119	284.67	2	122	171.04	3	122	314.14	163	330.66
3	1	098	113.33	9	040	192.88	3	018	111.90	4	053	317.70	053	297.71
4	2	42	351.09	0	090	139.55	0	075	117.82	5	071	65.51	063	180.63
5	0	37	313.81	1	056	108.90	0	045	124.08	6	061	123.09	057	127.11
6	0	37	313.81	2	056	108.90	0	010	124.36	7	013	170.71	023	207.64
7	0	41	293.70	3	014	327.93	0	023	348.46	8	020	205.12	043	204.07
8	0	41	293.70	4	018	197.24	0	023	198.46	9	017	288.98	024	272.87
9	0	41	293.70	5	017	279.89	0	012	340.70					
10	0	41	293.70	6	017	279.89	0	012	340.70					

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI		
1	3	564	182.55	1	233	183.31	8	814	357.33	4	438	311.47	4	438	311.47
2	0	46	295.18	2	173	293.53	0	051	116.00	5	023	124.79	3	124	255.47
3	0	46	295.18	3	051	176.69	0	074	130.00	6	040	107.55	4	033	127.22
4	0	46	295.18	4	051	150.57	0	031	107.55	7	021	100.93	5	033	127.22
5	0	46	295.18	5	051	113.54	0	012	107.55	8	021	100.93	6	033	127.22
6	0	46	295.18	6	051	113.54	0	034	107.55	9	021	100.93	7	033	127.22
7	0	46	295.18	7	051	113.54	0	034	107.55	10	021	100.93	8	033	127.22
8	0	46	295.18	8	051	113.54	0	034	107.55						
9	0	46	295.18	9	051	113.54	0	034	107.55						
10	0	46	295.18	10	051	113.54	0	034	107.55						

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI		
1	27	162.09	135.32	1	27	162.09	135.32	1	27	162.09	135.32	1	27	162.09	135.32
2	30	130.99	135.32	2	30	130.99	135.32	2	30	130.99	135.32	2	30	130.99	135.32
3	33	160.36	135.32	3	33	160.36	135.32	3	33	160.36	135.32	3	33	160.36	135.32
4	33	41.32	135.32	4	33	41.32	135.32	4	33	41.32	135.32	4	33	41.32	135.32
5	37	111.92	135.32	5	37	111.92	135.32	5	37	111.92	135.32	5	37	111.92	135.32
6	37	111.92	135.32	6	37	111.92	135.32	6	37	111.92	135.32	6	37	111.92	135.32
7	37	111.92	135.32	7	37	111.92	135.32	7	37	111.92	135.32	7	37	111.92	135.32
8	37	111.92	135.32	8	37	111.92	135.32	8	37	111.92	135.32	8	37	111.92	135.32
9	37	111.92	135.32	9	37	111.92	135.32	9	37	111.92	135.32	9	37	111.92	135.32
10	37	111.92	135.32	10	37	111.92	135.32	10	37	111.92	135.32	10	37	111.92	135.32

OCW: PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, BALL STATIONS

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FILE 126 ALPHA-WCL = 6.2 PDP RUN.PT 37.18
RUN 27 ALPHA-BAR = .5 Q-COMP = 32.16
POINT 5 SIGMA = 18J. W-REF = 200.55
COMPUTED FREQUENCY = 19.06, K = 1.493

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 19.06, K =

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
28	28.74	156.15	12.07	1.35	8.43	324.33	49.14	5.88	4.57	4.73	6.93	2.12	9.83	3.63	156.33	28.74
29	29.34	151.19	10.39	1.63	0.37	308.26	1.14	0.23	19.19	0.22	3.36	0.16	6.65	0.08	136.33	29.34
30	30.11	161.84	0.77	1.20	0.25	272.67	2.47	0.19	25.67	0.26	6.33	0.37	8.65	0.17	122.33	30.11
31	30.11	161.84	0.77	1.20	0.25	272.67	2.47	0.19	25.67	0.26	6.33	0.37	8.65	0.17	122.33	31.00
32	30.95	168.94	0.21	1.04	0.14	263.77	7.77	0.07	119.66	0.16	7.58	0.29	9.55	0.25	117.33	32.00
33	30.95	168.94	0.21	1.04	0.14	263.77	7.77	0.07	119.66	0.16	7.58	0.29	9.55	0.25	117.33	33.00
34	30.74	159.86	0.27	1.18	0.24	186.02	0.22	0.29	146.63	0.33	7.29	0.21	1.77	0.13	176.33	34.00
35	31.64	153.65	0.11	1.22	0.11	222.77	0.37	0.08	106.23	0.09	9.54	0.13	8.33	0.06	171.33	35.00
36	32.34	128.54	0.11	1.65	0.12	222.77	0.37	0.08	106.23	0.09	9.54	0.13	8.33	0.06	171.33	36.00

X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	N	CM-MAG	PHIN	N	CM-MAG	PHIN
1	192	171	109	85	1	51	20	26	1	118	35	1	118	35
2	104	151	70	20	1	13	20	76	1	107	55	1	107	55
3	026	134	00	23	1	21	10	76	1	007	35	1	007	35
4	026	119	00	12	1	01	10	47	1	007	16	1	007	16
5	012	98	00	08	1	02	35	69	1	001	10	1	001	10
6	022	80	00	06	1	05	69	19	1	001	25	1	001	25
7	004	67	00	31	1	17	67	18	1	001	43	1	001	43
8	011	50	00	08	1	07	69	18	1	001	39	1	001	39
9	011	34	00	08	1	04	18	08	1	001	22	1	001	22
10	011	10	00	08	1	04	21	18	1	001	08	1	001	08

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

[illegible]

TABLE 7

MODE 1 DATA FOR $\alpha_{MCL} = 6 \text{ deg}$, $\bar{\alpha} = 2 \text{ deg}$

$\sigma \text{ (deg)}$	k	page
-135	.0707	312
"	.1217	316
"	.1489	320
-90	.0712	324
"	.1209	328
"	.1499	332
-45	.0718	336
"	.1221	340
"	.1509	344
0	.0716	348
"	.1214	352
"	.1501	356
45	.0710	360
"	.1213	364
"	.1493	368
90	.0717	372
"	.1231	376
"	.1504	380
135	.0709	384
"	.1207	388
"	.1487	392
180	.0713	396
"	.1211	400
"	.1493	404

PRECEDING PAGE BLANK NOT FILMED

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 168 ALPHA-MCL = 6.0 POP RUN-PT 33.02
RUN 33 ALPHA-CAR = 2.0 O-COMP = .33246
POINT 1 SIGMA = .135 V-REF = .202.22
COMPUTED FREQUENCY = 9.16, K = .8707

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER	CPREAL	CPIMAG	.148-UPPER	CPREAL	CPIMAG	.261-UPPER	CPREAL	CPIMAG	.392-UPPER	CPREAL	CPIMAG	.530-UPPER	CPREAL	CPIMAG	.661-UPPER	CPREAL	CPIMAG
1	-25	.284	4.513	-6.828	.991	-.017	-3.907	.267	-.068	-2.754	.195	-.155	-2.356	-.443	-.175	-.274	-.728	-.507	-.883	-.249	-.088
2	-15	.542	1.654	-.398	-.017	-.017	-.263	.192	-.071	.318	-.028	.188	.182	.267	.401	.401	.216	.404	.212	.404	
3	-5	.117	2.609	-.232	-.017	-.017	-.002	.036	.071	-.028	.004	.097	.069	.131	.031	.031	.120	.023	.125	.023	
4	-1	.309	-.091	-.025	-.016	-.016	.010	.002	.041	.002	.002	.006	.053	-.042	-.025	-.025	.030	.034	.027	.034	
5	1	.212	-.058	-.038	-.017	-.017	-.002	.001	.018	-.002	.002	-.002	-.002	.002	.002	.002	.012	.007	.007	.007	
6	5	.121	-.033	-.023	.001	.001	-.002	.001	.001	-.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	
7	15	.378	.335	-.007	.020	.020	-.004	.001	.001	-.006	.006	.008	.009	.018	.018	.018	.003	.003	.003	.003	
8	25	.026	.026																		
9																					
10																					

X	N	CPREAL	CPIMAG	.660-UPPER	CPREAL	CPIMAG	.910-UPPER	CPREAL	CPIMAG	.012-LOWER	CPREAL	CPIMAG	.062-LOWER	CPREAL	CPIMAG	.148-LOWER	CPREAL	CPIMAG	.261-LOWER	CPREAL	CPIMAG
1	-2	.330	-.791	-1.595	-.648	-.022	-1.309	-.481	-.097	10.038	-2.071	6.351	-1.405	4.113	-.690	4.113	-.690	2.802	-.382	-.168	
2	-1	.200	-.213	-.407	-.220	-.016	-.409	-.219	-.097	4.320	-1.527	6.351	-.690	4.113	-.690	4.113	-.690	2.802	-.382	-.168	
3	1	.388	-.213	-.407	-.220	-.016	-.409	-.219	-.097	4.320	-1.527	6.351	-.690	4.113	-.690	4.113	-.690	2.802	-.382	-.168	
4	5	.020	.020	.019	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	
5	15	.002	.002	.004	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	
6	25	.020	-.020	-.014	-.026	-.013	-.018	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	
7	5	.004	-.004	-.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	
8	15	.007	-.007	-.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	
9	25	.002	-.002																		
10																					

X	N	CPREAL	CPIMAG	.530-LOWER	CPREAL	CPIMAG	.661-LOWER	CPREAL	CPIMAG	.774-LOWER	CPREAL	CPIMAG	.860-LOWER	CPREAL	CPIMAG	.910-LOWER	CPREAL	CPIMAG
1	1	.625	-.151	1.271	-.022	-.022	.509	-.091	.179	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	
2	1	.111	-.194	1.466	-.022	-.022	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	
3	1	.013	-.074	-.015	-.022	-.022	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	
4	1	.034	-.027	-.041	-.009	-.009	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	
5	1	.007	-.013	-.023	-.013	-.013	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	
6	1	.023	-.013	-.023	-.013	-.013	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	
7	1	.013	-.013	-.023	-.013	-.013	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	
8	1	.013	-.013	-.023	-.013	-.013	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	
9	1	.013	-.013	-.023	-.013	-.013	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	
10	1	.013	-.013	-.023	-.013	-.013	.509	-.091	.179	.117	-.212	-.491	-.195	-.195	-.195	-.195	-.195	

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 166 ALPHA-MCL = 6.0 POP RUN-PI 33.02
RUM 133 ALPHA-RAR = 2.0 C-COMP = 33246
POINT 1 ALPHA-SIGMA = 135.0 V-REF = 202.22
COMPUTED FREQUENCY = 9.13, K = .0707

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	.683	169.88	.900	171.74	3.916	176.13	2.756	182.64	2.395	189.83	2.799	195.07
2	2	.261	147.31	.290	157.48	.212	145.48	.249	151.49	.252	151.16	.288	157.28
3	4	.083	140.05	.398	157.50	.338	147.70	.369	153.58	.429	161.53	.455	167.34
4	5	.330	195.96	.318	193.28	.083	120.76	.101	106.23	.148	62.06	.125	76.60
5	6	.734	123.84	.207	97.02	.036	86.66	.067	86.27	.024	77.67	.037	88.32
6	7	.220	15.31	.139	173.22	.010	9.45	.041	8.52	.053	355.29	.024	7.98
7	8	.334	205.43	.132	241.80	.010	172.92	.002	316.32	.055	229.88	.039	233.60
8	9	.134	339.89	.004	138.64	.020	112.14	.009	255.61	.029	128.53	.023	127.03
9	10	.124	17.82	.023	3.21	.031	146.13	.007	75.21	.008	95.54	.013	73.04
10		.044	53.06	.021	110.78	.004	161.72	.010	235.90	.020	116.72	.032	161.11

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	.174	201.28	1.722	202.11	1.395	209.19	10.250	348.34	6.505	347.53	4.170	350.48
2	3	.299	342.81	.459	28.55	.174	326.07	1.728	37.20	.067	250.50	.281	280.77
3	4	.442	28.81	.117	60.81	.463	28.07	.540	37.20	.067	54.08	.431	27.79
4	5	.120	80.58	.031	79.91	.115	81.77	.023	210.60	.025	327.81	.058	78.28
5	6	.033	81.79	.032	14.97	.033	78.99	.039	69.62	.085	142.65	.029	67.80
6	7	.034	233.75	.036	242.26	.028	3.18	.027	343.72	.076	339.71	.033	349.09
7	8	.034	105.87	.036	94.56	.024	222.52	.017	196.77	.051	202.79	.025	209.13
8	9	.015	115.39	.013	113.23	.013	82.76	.032	287.76	.012	45.75	.036	4.85
9	10	.002	187.66	.005	113.69	.012	114.40	.041	119.85	.024	122.21	.031	130.13
						.006		.026	1.81	.009	358.32	.013	12.55

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.632	354.70	1.271	359.02	.518	10.17	.213	332.18	.535	246.64	.347	124.23
2	2	.155	315.96	.511	326.20	.227	358.31	.181	322.88	.300	328.19	.228	139.21
3	3	.424	27.32	.511	24.45	.457	20.47	.496	35.89	.454	36.83	.510	29.61
4	4	.075	80.30	.099	97.14	.099	62.99	.114	57.41	.074	89.80	.125	85.54
5	5	.029	71.77	.051	72.21	.034	62.95	.041	72.98	.036	76.80	.027	95.20
6	6	.034	348.96	.042	346.94	.027	63.30	.049	343.31	.028	19.03	.041	12.14
7	7	.018	212.69	.026	210.19	.019	211.01	.025	216.07	.023	227.11	.026	209.02
8	8	.013	56.22	.010	32.83	.026	59.38	.011	70.04	.023	271.72	.016	82.02
9	9	.019	133.29	.028	141.87	.007	154.15	.014	124.62	.014	152.13	.019	115.04
10	10	.007	36.07	.013	51.29	.003	67.92	.002	156.62	.005	127.93	.005	132.86

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 158 ALPHA-MCL = 6.0 POP RUN.PI 33.02
RUN 33 ALPHA-BAR = 2.0 C-COMP = .33246
POINT 1 SIGMA = -135. V-REF = 202.22
COMPUTED FREQUENCY = 9.10, K = .0707

FOUPIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012	.0362	.148	.261	.392	.530	.661
		DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR
1	35	324	-6.584	13.179	-2.396	8.020	-2.211	4.182
2	35	204	-3.250	-1.514	-2.623	-2.207	-2.077	-2.067
3	35	345	-2.292	-1.111	-2.720	-2.032	-2.041	-2.056
4	35	297	-2.079	-0.661	-2.326	-2.005	-2.057	-2.044
5	35	422	-2.573	-0.442	-2.154	-2.010	-2.004	-2.002
6	35	186	-2.066	-0.209	-2.043	-2.008	-2.019	-2.002
7	35	125	-2.053	-0.166	-2.043	-2.011	-2.012	-2.001
8	35	135	-2.053	-0.111	-2.043	-2.012	-2.012	-2.001
9	35	135	-2.053	-0.111	-2.043	-2.012	-2.012	-2.001
10	35	135	-2.053	-0.111	-2.043	-2.012	-2.012	-2.001

X	N	.774	.560	.910
		DELCPR	DELCPR	DELCPR
1	2	209	907	1.114
2	2	055	047	1.261
3	2	014	077	1.335
4	2	042	022	1.007
5	2	008	011	1.009
6	2	000	013	1.002
7	2	000	013	1.002
8	2	001	002	1.001
9	2	001	002	1.001
10	2	004	002	1.002

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	W1	W2	W4	W500	W10	W125
			CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	2	262	2.191	0.357	3.558	0.674	7.681	5.279
2	2	055	047	077	047	077	047	077
3	2	014	077	022	014	077	014	077
4	2	042	022	008	042	022	042	022
5	2	008	011	000	008	011	008	011
6	2	000	013	000	000	013	000	013
7	2	000	013	000	000	013	000	013
8	2	001	002	001	001	002	001	002
9	2	001	002	001	001	002	001	002
10	2	004	002	004	004	002	004	002

*** STABILITY PARAMETER

* XI = .2888 *

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 168 ALPHA-POL = 6.0 PDP RUN-PT 33.02
MUN 33 ALPHA-PAR = 2.0 Q-COMP = 33246
POINT 1 SIGMA = -135.0 V-DEF = 232.22
COMPUTED FREQUENCY = 9.10, K = .0707

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661								
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI							
35	930	349.44	13.395	349.70	8.077	353.20	5.561	357.37	4.192	359	3.59	4.036	10.07	3.170	17.91
1	926	235.86	.808	230.46	.296	224.49	.093	187.94	.097	136.48	.083	104.65	.083	.083	105.08
2	216	327.23	.728	251.22	.151	112.18	.087	222.80	.080	209.37	.065	184.96	.065	.065	295.08
3	308	174.57	.331	259.56	.056	354.91	.050	243.06	.038	224.87	.046	236.93	.046	.046	301.62
4	712	306.38	.152	254.65	.013	312.92	.038	273.44	.019	186.96	.028	284.36	.028	.028	141.50
5	192	199.38	.213	348.44	.023	343.15	.017	230.58	.030	165.77	.017	83.87	.017	.017	85.57
6	116	26.66	.098	80.69	.018	228.34	.022	203.74	.028	333.74	.026	329.35	.026	.026	26.16
7	375	163.70	.013	27.70	.042	306.67	.015	172.34	.013	155.15	.018	169.15	.018	.018	249.66
8	132	180.95	.026	310.08	.016	178.56	.016	162.63	.020	317.92	.018	249.37	.018	.018	54.02
9	034	269.54													
10															

X =	.774	.850	.910							
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI		
1	2.368	220.34	1.372	34.60	1.353	34.60	1.375	359.29	1.267	346.82
2	.072	279.46	.026	118.42	.279	270.76	.252	221.17	.085	234.86
3	.047	331.57	.006	229.96	.049	44.38	.164	354.50	.065	346.81
4	.014	54.10	.005	28.15	.013	122.03	.041	281.96	.010	296.25
5	.024	338.72	.005	170.23	.014	213.78	.037	286.85	.005	317.50
6	.013	88.69	.009	101.73	.006	147.36	.016	82.06	.003	58.45
7	.038	342.46	.003	48.89	.003	178.36	.002	47.03	.003	188.45
8	.003	238.59	.003	233.72	.003	297.99	.016	175.21	.003	188.45
9	.004	333.08	.005	332.49	.003	173.02	.008	352.39	.002	328.08
10										

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	55AP FRACTION	N	W1 --.125	W2 --.000	W4 --.125	W6 --.500	W10 --1.125	* XI =	.2888
			CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	
1	2	310	348.25	356.75	13.316	172.45	9.320	34.50	
2	1	199	344.21	348.13	1.772	259.55	.933	321.19	
3	3	591	52.75	8.37	.492	143.37	.634	78.31	
4	4	130	104.11	87.72	.286	257.04	.227	21.42	
5	5	040	104.85	350.77	.268	117.36	.089	147.01	
6	6	048	36.09	21.23	.198	248.05	.044	82.71	
7	7	035	257.90	209.34	.116	329.19	.056	230.82	
8	8	028	199.89	181.43	.059	63.09	.047	149.63	
9	9	026	168.26	105.15	.068	355.74	.034	332.37	
10	10	019	157.55	20.87	.100	54.62	.042	86.23	

*** STABILITY PARAMETER

* XI = .2888

ORIGINAL FILE IS OF POOR QUALITY

MODE 1 --- OCWT PERIODICITY TEST
CENTIF BLADE DATA, WALL STATIONS

FILE 170 ALPHA-WCL = 6.0 PDP RUN.PI 33.06
RUN 33 ALPHA-DAR = 2.0 C-COMP = 38.75
POINT 3 SIGMA = -135. V-PDF = 199.82
COMPUTED FREQUENCY = 15.48, K = .1217

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	-25.070	5.526	-7.274	-4.243	.007	-2.602	-2.991	-2.729
2	1.396	.971	.030	.024	.243	-.130	.013	-.023
3	-2.774	-2.222	-.020	-.060	-.003	-.017	-.013	-.002
4	1.695	.435	.256	-.061	-.082	.043	-.014	-.018
5	-.132	-.666	.065	.015	-.066	.013	-.022	-.015
6	-.186	-.139	-.072	.014	.009	.012	-.034	-.002
7	.105	-.069	-.063	.013	.004	-.013	-.004	-.021
8	.152	-.116	.011	.004	.007	.016	-.012	-.001
9	.051	-.047	-.004	-.004	-.005	.008	-.004	-.004
10	.016							

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	-2.224	-1.256	-1.750	-1.470	-1.215	-2.903	6.908	4.136
2	.004	.399	.017	.013	.110	-.007	-.425	-.066
3	-.003	-.042	-.037	-.017	.038	-.023	-.100	-.020
4	.001	.004	-.004	.008	.010	.057	.035	-.017
5	.001	.004	-.004	.008	.010	.057	.035	-.017
6	.001	.004	-.004	.008	.010	.057	.035	-.017
7	.001	.004	-.004	.008	.010	.057	.035	-.017
8	.001	.004	-.004	.008	.010	.057	.035	-.017
9	.001	.004	-.004	.008	.010	.057	.035	-.017
10	.001	.004	-.004	.008	.010	.057	.035	-.017

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1.562	-.372	1.132	-.065	-.085	-.769	-.130
2	-.139	-.264	-.144	-.023	-.034	-.120	-.316
3	-.017	-.055	-.033	-.039	-.016	.016	-.047
4	-.019	-.057	-.021	-.044	-.013	-.052	-.049
5	-.006	-.004	-.004	-.017	-.006	-.011	-.000
6	-.001	-.003	-.002	-.013	-.004	-.014	-.017
7	-.001	-.003	-.002	-.013	-.004	-.014	-.017
8	-.001	-.003	-.002	-.013	-.004	-.014	-.017
9	-.001	-.003	-.002	-.013	-.004	-.014	-.017
10	-.001	-.003	-.002	-.013	-.004	-.014	-.017

OCWT PERIODICITY TEST CODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 172
RUN 33
POINT 3

ALPHA-MCL = 6.0
ALPHA-PR = 2.0
SIGMA = 135

PDP RUN.PI 33.06
Q-COMP = 32473
V-REF = 199.82
K = .1217

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
** BLADE PRESSURES, PER RADIAN **

X =	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	26.649	168.03	7.340	172.34	4.243	179.90	3.084	186.15	2.546	196.02	3.217	201.60	3.048	206.45	3.284	212.04
2	1.700	34.81	2.291	82.36	.666	182.50	.188	130.62	.216	126.94	.271	87.31	.284	94.55	.036	272.03
3	4.820	212.01	2.224	262.50	.103	341.90	.063	222.96	.050	110.01	.051	272.43	.041	273.03	.037	118.92
4	.694	106.10	.218	72.68	.030	120.56	.066	96.04	.049	105.09	.041	126.72	.015	115.04	.029	178.19
5	.232	323.31	.124	125.09	.017	15.62	.027	342.97	.019	168.88	.018	257.74	.021	270.40	.004	176.51
6	.243	64.41	.074	208.62	.037	188.70	.015	72.84	.019	168.88	.022	181.44	.029	178.19	.004	176.51
7	.192	322.97	.021	28.85	.008	118.00	.015	242.04	.019	168.88	.022	181.44	.029	178.19	.004	176.51
8	.131	85.85	.021	28.85	.008	118.00	.015	242.04	.019	168.88	.022	181.44	.029	178.19	.004	176.51
9	.049	289.02	.021	28.85	.008	118.00	.015	242.04	.019	168.88	.022	181.44	.029	178.19	.004	176.51
10																

X =	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.554	209.46	2.067	211.93	1.709	210.68	1.709	210.68	1.709	210.68	1.709	210.68	1.709	210.68	1.709	210.68
2	.318	103.40	.341	111.36	.343	115.16	.343	115.16	.343	115.16	.343	115.16	.343	115.16	.343	115.16
3	.039	282.94	.047	263.81	.045	262.66	.045	262.66	.045	262.66	.045	262.66	.045	262.66	.045	262.66
4	.036	173.39	.042	124.42	.040	115.44	.040	115.44	.040	115.44	.040	115.44	.040	115.44	.040	115.44
5	.036	173.39	.042	124.42	.040	115.44	.040	115.44	.040	115.44	.040	115.44	.040	115.44	.040	115.44
6	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39
7	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39
8	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39
9	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39	.025	82.39
10																

CP POOR QUALITY

X =	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.605	349.60	1.161	347.40	.411	350.75	.411	350.75	.411	350.75	.411	350.75	.411	350.75	.411	350.75
2	.299	117.79	.381	112.17	.337	93.39	.337	93.39	.337	93.39	.337	93.39	.337	93.39	.337	93.39
3	.071	309.78	.112	269.92	.101	280.13	.101	280.13	.101	280.13	.101	280.13	.101	280.13	.101	280.13
4	.053	251.04	.056	233.13	.096	150.25	.096	150.25	.096	150.25	.096	150.25	.096	150.25	.096	150.25
5	.007	108.51	.073	183.95	.019	61.99	.019	61.99	.019	61.99	.019	61.99	.019	61.99	.019	61.99
6	.024	259.02	.032	270.03	.015	240.67	.015	240.67	.015	240.67	.015	240.67	.015	240.67	.015	240.67
7	.001	168.60	.005	168.79	.013	265.98	.013	265.98	.013	265.98	.013	265.98	.013	265.98	.013	265.98
8	.004	212.11	.004	180.76	.007	184.25	.007	184.25	.007	184.25	.007	184.25	.007	184.25	.007	184.25
9	.018	258.26	.023	259.12	.017	242.06	.017	242.06	.017	242.06	.017	242.06	.017	242.06	.017	242.06
10																

MODE 1 -- OCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 170 ALPHA-CL = 6.0 PDP RUN-PI 33.06
RUT 33 ALPHA-RAR = 2.0 Q-COMP = .32473
POINT 3 SIGMA = -135. V-REF = 199.82
COMPUTED FREQUENCY = 15.48, K = .1217

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, MOMENT, PER RADIANT ***

X	.012	.062	.148	.261	.392	.530	.661
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	36.591	-8.427	13.882	-5.128	8.420	-1.087	5.839
2	-2.511	-2.168	-8.822	-4.501	-2.284	-1.111	-1.130
3	2.884	-3.229	.455	.429	.131	-.053	.075
4	.637	.410	-3.367	-1.960	.041	.042	.039
5	-.232	-.610	.027	.100	.007	.033	.018
6	-.123	-.271	.016	.155	-.032	.027	.025
7	-.058	-.100	.049	.020	.124	-.037	.019
8	-.017	.006	-.009	.038	.007	.020	.009
9			.005	-.060	-.000	-.028	.015
10							

X	.774	.860	.910	.910	.910	.910	.910
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	2.270	1.172	1.162	1.138	1.164	1.164	1.164
2	-.061	-.038	.006	.007	.007	.007	.007
3	.010	.052	.019	.013	.013	.013	.013
4	.007	.007	.007	.007	.007	.007	.007
5	.007	.007	.007	.007	.007	.007	.007
6	.003	.003	.003	.003	.003	.003	.003
7	.003	.003	.003	.003	.003	.003	.003
8	.001	.001	.001	.001	.001	.001	.001
9	.001	.001	.001	.001	.001	.001	.001
10							

*** WALL PRESSURES, PER RADIANT ***

WALL NO.	.125	.200	.300	.400	.500	.600	.700	.800	.900	.900
GAP FRACTION	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL
1	2.288	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032
2	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032	-.032
3	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032	-.032
4	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032	-.032
5	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032	-.032
6	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032	-.032
7	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032	-.032
8	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032	-.032
9	-.018	-.064	-.067	-.043	-.033	-.032	-.032	-.032	-.032	-.032
10										

*** STABILITY PARAMETER

* XI = .3603

MODE 1 -- OCPI PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 176 ALPHA-MCL = 6.0 POP RUN-PT 33.06
RUN 33 ALPHA-DR = 2.0 C-COMP = 32.473
POINT 3 SIGMA = -135. V-REF = 199.82
COMPUTED FREQUENCY = 15.4e, K = .1217

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
		.012	.062	.148	.261	.392	.530	.661					
1	37	540	347.03	14.231	347.30	1.490	352.64	5.542	358.16	4.397	7.05	4.228	12.72
2	3394	214.70	.920	205.89	.305	291.27	.142	156.83	.192	95.88	.177	152.22	22.39
3	4.330	311.77	.625	43.35	.142	338.07	.076	352.21	.120	301.64	.065	288.93	87.21
4	.759	32.45	.104	193.60	.059	46.07	.020	355.49	.060	176.04	.049	286.07	286.07
5	.642	250.58	.135	276.04	.034	78.07	.030	212.53	.032	154.91	.027	185.12	166.86
6	.263	151.65	.057	232.67	.037	212.33	.030	212.53	.032	154.91	.014	113.48	113.48
7	.302	143.91	.051	16.02	.046	266.11	.036	212.69	.033	313.30	.012	140.81	140.81
8	.187	147.34	.028	256.15	.042	288.15	.017	250.99	.019	241.54	.025	195.01	195.01
9	.162	252.34	.021	256.15	.021	288.15	.006	325.91	.014	337.72	.001	333.10	333.10
10	.018	160.36	.028	269.72	.028	269.72	.026	295.32	.015	261.73	.010	272.84	272.84

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
		.774	.900	.910									
1	2	555	27.30	1.556	30.70	1.556	30.70	1.556	30.70	1.556	30.70	1.556	30.70
2	.082	185.51	.042	178.86	.042	178.86	.042	178.86	.042	178.86	.042	178.86	178.86
3	.060	60.64	.013	351.86	.013	351.86	.013	351.86	.013	351.86	.013	351.86	351.86
4	.047	284.64	.019	177.90	.019	177.90	.019	177.90	.019	177.90	.019	177.90	177.90
5	.039	77.55	.007	67.08	.007	67.08	.007	67.08	.007	67.08	.007	67.08	67.08
6	.029	231.50	.007	90.81	.005	212.81	.005	212.81	.005	212.81	.005	212.81	212.81
7	.004	212.82	.007	58.81	.005	212.81	.005	212.81	.005	212.81	.005	212.81	212.81
8	.016	251.19	.010	319.88	.005	212.81	.005	212.81	.005	212.81	.005	212.81	212.81
9	.003	174.47	.003	113.65	.004	112.62	.004	112.62	.004	112.62	.004	112.62	112.62
10	.007	279.06	.003	113.65	.004	112.62	.004	112.62	.004	112.62	.004	112.62	112.62

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
			CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
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			CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
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*** STABILITY PARAMETER

* XI = .3603

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 172 ALPHA-MCL = 6.0 PDP RUN PT 33.08
RUN 33 ALPHA-RAR = 2.0 Q-COMP = 32962
POINT 5 SIGMA = 135 V-REF = 201.34
COMPUTED FREQUENCY = 19.09, K = .1489

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	-25	.072	6.170	1.355	-4.059	.237	-2.895	-2.548
2	1	.069	3.830	.119	.326	.213	.326	.302
3	-2	.124	3.614	.270	-.041	.042	-.009	-.005
4	3	.092	.279	-.058	.100	-.011	.020	.023
5	4	.018	.066	.185	-.006	.011	.024	.016
6	5	.022	-.218	.057	.009	.017	.003	.009
7	6	.062	.190	.016	.011	.009	.010	.005
8	7	.042	-.186	.012	.003	.002	.013	.005
9	8	.037	.030	.009	.002	.010	.015	.007
10	9	.017	-.073	-.020	.006	.012	.015	.002

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	-2	.058	-1.058	-.884	-1.296	-.692	10.494	2.872
2	1	.005	.005	-.041	.038	-.046	.018	.019
3	-2	.005	-.031	-.003	-.028	.010	-.061	-.051
4	3	.022	.015	.007	.017	.013	.013	.016
5	4	.009	.014	.003	.012	.005	.021	.019
6	5	.004	-.001	.004	.003	.004	.000	.003
7	6	.004	.005	.004	.003	.007	.002	.002
8	7	.004	.005	.005	.003	.016	.006	.005
9	8	.008	.001	.005	.002	.010	.009	.002
10	9							

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	-25	.120	1.238	.523	.176	-.487	.004
2	1	.165	.010	.302	.185	.171	.053
3	-2	.080	-.010	-.021	.048	.037	.015
4	3	.008	.062	-.006	-.031	-.035	-.020
5	4	.015	.004	.013	.035	.016	.019
6	5	.011	.014	.009	.003	.004	.010
7	6	.013	.001	.012	.007	.015	.014
8	7	.004	.007	.004	.004	.003	.014
9	8	.006	.004	.002	.004	.003	.003
10	9	.002					

CCMT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 172 ALPHA-WCL = 6.0 PCP RUN-PT 33.08
MUR 33 ALPHA-PAR = 2.0 C-CCMP = 32962
POINT 33 SIGMA = 135.0 V-REF = 241.34
COMPUTED FREQUENCY = 19.09, K = .1489
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER PI/IAN ***

X	CP	.012-UPPER PHI	.062-UPPER CP-MAG	.142-UPPER CP-MAG	.261-UPPER CP-MAG	.392-UPPER CP-MAG	.530-UPPER CP-MAG	.661-UPPER CP-MAG	PHI
1	25	.820	169.35	4.065	176.65	2.911	185.95	2.763	195.37
2	25	.820	27.92	.390	33.09	.279	34.52	.237	43.41
3	25	.820	278.24	.058	134.43	.030	216.48	.054	92.11
4	25	.820	348.24	.101	129.37	.037	166.84	.053	313.39
5	25	.820	60.16	.023	343.80	.027	17.21	.022	352.51
6	25	.820	142.27	.093	38.60	.027	39.29	.021	120.08
7	25	.820	262.32	.041	59.27	.023	22.64	.011	28.13
8	25	.820	320.88	.019	35.92	.005	340.11	.005	296.93
9	25	.820	43.06	.012	347.26	.014	311.29	.007	296.93
10	25	.820	233.23	.024	300.73	.013	296.96	.018	330.64

X	CP	.774-UPPER PHI	.660-UPPER CP-MAG	.910-UPPER CP-MAG	.012-LOWER CP-MAG	.062-LOWER CP-MAG	.142-LOWER CP-MAG	.261-LOWER CP-MAG	PHI
1	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
2	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
3	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
4	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
5	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
6	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
7	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
8	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
9	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61
10	2	.314	207.21	1.342	236.61	1.450	236.61	1.450	236.61

ORIGINAL PAGE IS
OF POOR QUALITY

X	N	.392-LOWER CP-MAG	.530-LOWER CP-MAG	.661-LOWER CP-MAG	.774-LOWER CP-MAG	.800-LOWER CP-MAG	.910-LOWER CP-MAG	PHI	
1	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
2	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
3	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
4	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
5	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
6	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
7	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
8	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
9	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88
10	1	.650	355.78	.571	235.50	.499	192.88	.499	192.88

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- ACWI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 172 ALPHA-CL = 6.0 POP RUN-PT 33.08
RUM 33 ALPHA-PAR = 2.0 Q-COMP = 32962
POINT 5 SIGMA = -175. V-PER = 201.34
COMPUTED FREQUENCY = 19.09, K = .1489

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.149		.261		.392		.530		.661	
		DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH
1	35	566	-9.036	13.254	-3.390	6.321	-1.097	5.767	-1.104	4.310	.611	4.037	1.056	3.370	1.381
2	-2.780	-1.972	-1.560	-3.17	-1.44	-258	-0.72	-0.97	-0.75	-0.07	-0.97	-0.76	-0.19	.001	.054
3	2.154	-3.711	3.17	3.55	1.43	.059	.143	.043	.059	.024	.124	.019	.093	.002	.068
4	.580	-4.418	.443	2.63	.923	.079	.044	.020	.112	.052	.008	.022	.029	.004	.043
5	.011	-7.20	-0.37	-2.10	.923	.009	.016	-0.20	.023	.030	.002	.019	.007	.050	.018
6	-0.18	2.95	.047	-0.24	.923	.012	.011	.009	.004	.026	.030	.017	.006	.003	.004
7	-0.038	-2.05	.068	.022	.923	.003	.011	.009	.011	.006	.007	.017	.019	.000	.019
8	-0.037	-2.05	.068	.022	.923	.003	.011	.009	.011	.006	.007	.017	.019	.000	.019
9	-0.159	.043	.024	.015	.923	.022	.024	.004	.006	.002	.009	.003	.003	.012	.008
10	.033	.092	.024	.015	.923	.022	.024	.004	.006	.002	.009	.003	.003	.012	.008
														.004	.002
														.015	.000

X	N	.774		.860		.910		.910		.910		.910		.910	
		DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH	DELCPR	DELCPH
1	2.234	1.267	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089
2	-0.053	-0.010	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027
3	-0.053	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034	-0.034
4	-0.013	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015
5	-0.013	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015
6	-0.022	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
7	-0.022	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
8	-0.022	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
9	-0.022	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
10	-0.011	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014

*** STABILITY PARAMETER

WALL NO. CAP FRACTION	N	.125		.125		.125		.125		.125		.125		.125	
		CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG	CPREAL	CPHAG
1	2	339	-0.319	3.379	-0.151	-13.066	2.371	-2.512	-220	7.235	5.161	7.235	5.161	7.235	5.161
2	1	-0.44	500	3.764	440	-13.066	-1.401	-2.512	-220	7.235	5.161	7.235	5.161	7.235	5.161
3	2	-0.057	-0.113	-0.113	-0.251	-0.251	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549
4	3	-0.057	-0.113	-0.113	-0.251	-0.251	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549
5	4	-0.057	-0.113	-0.113	-0.251	-0.251	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549
6	5	-0.057	-0.113	-0.113	-0.251	-0.251	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549
7	6	-0.057	-0.113	-0.113	-0.251	-0.251	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549
8	7	-0.057	-0.113	-0.113	-0.251	-0.251	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549
9	8	-0.057	-0.113	-0.113	-0.251	-0.251	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549
10	9	-0.057	-0.113	-0.113	-0.251	-0.251	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549	-0.549

*** WALL PRESSURES, PER RADIAN ***

* XI = .3803 *

OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 172 ALPHA-WCL = 6.0 PDP KUM-PT 33.08
RUM 33 ALPHA-BAR = 2.0 Q-COMP = 32962
POINT 5 SIGMA = -135. V-REF = 201.34
COMPUTED FREQUENCY = 19.09, K = .1489

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661							
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI						
1	36.696	345.74	14.263	346.25	8.393	352.49	5.768	358.96	4.353	8.07	4.221	14.49	3.366	24.22
2	3.408	215.35	.687	192.18	.268	195.67	.123	182.34	.038	93.93	.145	131.13	.054	89.12
3	4.291	300.13	.407	38.83	.154	192.35	.026	308.25	.136	280.36	.095	281.27	.069	271.89
4	.715	35.77	.448	171.88	.058	48.74	.026	332.78	.053	171.54	.047	155.21	.043	275.99
5	.295	270.84	.213	260.00	.019	239.51	.030	228.96	.030	183.85	.020	172.65	.005	126.62
6	.208	93.54	.051	331.90	.027	115.10	.030	172.11	.027	116.10	.020	162.04	.005	126.62
7	.203	259.49	.071	18.38	.014	311.18	.014	126.60	.027	344.63	.012	330.79	.018	89.09
8	.166	100.53	.019	114.77	.003	142.64	.003	192.90	.021	214.18	.003	220.43	.015	325.07
9	.097	196.87	.029	209.80	.022	184.50	.007	123.74	.002	180.77	.003	227.31	.004	155.47
10	.097	70.54	.039	51.54	.026	121.13	.026	133.96	.029	148.41	.024	161.82	.015	179.91

X =	.774	.800	.910	
N	DELCPM	PHI	DELCPM	PHI
1	2.579	29.94	1.335	35.38
2	.063	189.23	.082	249.34
3	.035	229.17	.052	50.67
4	.013	260.49	.006	145.60
5	.023	17.43	.008	14.93
6	.011	219.74	.007	276.85
7	.005	332.85	.008	159.61
8	.000	357.58	.017	139.25
9	.012	197.58	.006	298.77
10			.014	274.06
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*** STABILITY PARAMETER

* XI = .3803 *

WALL NO.	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.360	352.23	3.383	357.44	13.260	169.72	2.522	185.00	8.880	35.50
2	.502	95.02	.282	298.77	1.590	249.08	.305	258.42	.719	115.37
3	.635	338.14	.287	298.77	.817	166.44	.055	258.94	.549	115.37
4	.060	200.20	.043	206.07	.633	241.90	.031	182.30	.176	125.16
5	.032	200.85	.066	276.42	.154	46.45	.044	353.20	.138	125.16
6	.047	148.81	.026	76.72	.081	230.22	.022	48.33	.122	351.47
7	.052	138.79	.028	40.30	.061	46.03	.010	82.98	.025	114.63
8	.009	202.76	.011	40.30	.014	268.12	.007	57.18	.017	347.97
9	.055	111.87	.010	269.34	.047	346.68	.009	305.64	.016	110.22
10	.010	44.43	.002	332.64	.003	346.68	.008	319.63		

*** WALL PRESSURES, PER RADIAN ***

OF POOR QUALITY

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OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 162 ALPHA-MCL = 6.0 PDP RUN-PT 32.01
RUM 32 ALPHA-FAP = 2.0 Q-COMP = 32.67
POINT 1 SIGMA = .90 V-REF = 200.14
CG-COMPUTED FREQUENCY = 9.08, K = .0712

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	23	790	10.248	1.761	1.761	3.715	1.761	4.42	1.761	2.525	1.761	3.48	1.761	2.119	1.761
2	1	922	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172
3	4	183	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392
4	5	175	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
5	6	464	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
6	7	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
7	8	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
8	9	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
9	10	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
10	11	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	23	790	10.248	1.761	1.761	3.715	1.761	4.42	1.761	2.525	1.761	3.48	1.761	2.119	1.761
2	1	922	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172
3	4	183	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392
4	5	175	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
5	6	464	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
6	7	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
7	8	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
8	9	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
9	10	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
10	11	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	23	790	10.248	1.761	1.761	3.715	1.761	4.42	1.761	2.525	1.761	3.48	1.761	2.119	1.761
2	1	922	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172	1.172
3	4	183	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392	4.392
4	5	175	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
5	6	464	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
6	7	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
7	8	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
8	9	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
9	10	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
10	11	128	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 162 ALPHA-WCL = 6.0 PDP RUN-PT 32.01
RUM, 32 ALPHA-EAR = 2.0 Q-COMP = 32567
POINT 1 SIG-A = -90. V-REF = 200.14
COMPUTED FREQUENCY = 9.08, K = .0712
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	904	155.70	495	164.27	741	173.22	549	187.84	341	235.14	546	217.48	524	227.82	524	227.82
2	1930	354.90	111	339.00	111	313.84	289	303.49	260	309.73	312	332.73	312	334.11	429	334.11	429
3	4	396	92.38	421	78.97	457	76.87	453	78.82	504	76.28	438	78.00	429	77.51	429	77.51
4	651	152.15	126	67.66	185	113.96	177	101.33	153	64.97	114	82.35	110	81.84	110	81.84	110
5	532	228.38	144	352.80	1054	300.22	107	323.64	112	279.90	149	283.96	1054	290.33	1054	290.33	1054
6	354	248.52	144	135.53	104	167.42	106	187.11	112	182.59	141	174.32	100	174.38	100	174.38	100
7	597	308.83	144	171.11	1048	317.16	1033	300.84	110	99.35	106	243.60	1008	258.09	1008	258.09	1008
8	289	228.95	1034	185.85	1023	31.60	1016	115.88	131	25.91	131	31.51	1009	52.95	1009	52.95	1009
9	586	350.39	1002	185.85	1004	190.61	1026	187.21	139	119.22	139	124.03	1014	121.91	1014	121.91	1014
10	171	133.40	1037	171.18	1045	194.37	1036	100.84	139	120.19	139	109.59	1014	110.20	1014	110.20	1014

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	144	233.44	176	237.16	901	331.43	901	328.58	608	328.58	409	327.77	604	326.24	604	326.24
2	173	330.31	129	302.60	1461	206.34	206	198.61	198	150.99	143	232.83	143	276.47	382	276.47	382
3	417	77.24	420	75.77	373	69.67	373	69.67	116	248.75	116	70.63	116	72.97	116	72.97	116
4	103	81.63	112	77.01	112	83.30	112	83.30	116	248.75	116	70.63	116	72.97	116	72.97	116
5	103	292.51	112	290.56	140	293.76	140	293.76	116	248.75	116	70.63	116	72.97	116	72.97	116
6	591	176.62	112	173.15	136	156.59	136	156.59	116	248.75	116	70.63	116	72.97	116	72.97	116
7	1012	242.99	112	243.41	136	156.59	136	156.59	116	248.75	116	70.63	116	72.97	116	72.97	116
8	1007	69.98	112	185.90	136	156.59	136	156.59	116	248.75	116	70.63	116	72.97	116	72.97	116
9	1024	123.52	112	134.41	136	156.59	136	156.59	116	248.75	116	70.63	116	72.97	116	72.97	116
10	1014	103.64	112	134.41	136	156.59	136	156.59	116	248.75	116	70.63	116	72.97	116	72.97	116

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	714	324.65	469	322.52	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24
2	109	304.43	469	313.73	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604
3	348	81.08	469	75.98	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604
4	580	309.33	469	83.62	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604
5	580	309.33	469	83.62	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604
6	580	309.33	469	83.62	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604
7	580	309.33	469	83.62	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604
8	580	309.33	469	83.62	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604
9	580	309.33	469	83.62	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604
10	580	309.33	469	83.62	756	318.84	552	307.98	672	259.17	358	339.14	604	326.24	604	326.24	604

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MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 162 ALPHA-MCL = 6.0 POP RUN.PT 32.01
RUN 32 ALPHA-RAP = 2.0 C-COMP = .32567
POINT 1 SIGMA = -90. V-PEF = 200.14
COMPUTED FREQUENCY = 9.08, K = .0712

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X = .012	.062	.148	.261	.392	.530	.661
N DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1 32.485 -14.983	11.449 -4.935	7.115 -2.585	4.856 -1.211	3.506 -.011	3.186 .656	2.264 1.373
2 -3.232 -4.477	-1.052 -.011	-0.317 -.018	-0.148 -.029	-0.104 -.157	-0.036 -.020	0.049 -.008
3 .388 -4.061	-0.183 -.026	-0.088 -.031	-0.056 -.036	-0.023 -.012	-0.011 -.005	-0.014 -.015
4 .581 -.291	-0.291 -.048	-0.088 -.011	-0.027 -.001	-0.014 -.004	-0.002 -.003	-0.034 -.003
5 .005 -.383	-0.048 -.029	-0.008 -.012	-0.001 -.001	-0.001 -.001	-0.001 -.001	-0.011 -.000
6 -.042 -.162	-0.029 -.007	-0.008 -.009	-0.003 -.005	-0.001 -.001	-0.001 -.001	-0.008 -.012
7 .135 -.223	-0.007 -.033	-0.009 -.037	-0.005 -.027	-0.003 -.014	-0.001 -.016	-0.011 -.014
8 -.099 -.353	-0.033 -.042	-0.037 -.051	-0.027 -.044	-0.014 -.031	-0.009 -.007	-0.014 -.004
9 .033 -.202	-0.042 -.042	-0.051 -.051	-0.044 -.044	-0.031 -.031	-0.006 -.006	-0.011 -.004
10						

X = .774	.860	.910	.910	.910	.910	.910
N DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1 1.629 1.278	1.278 1.278	1.133 1.110	1.133 1.110	1.133 1.110	1.133 1.110	1.133 1.110
2 .051 .036	.036 .036	.015 .041	.015 .041	.015 .041	.015 .041	.015 .041
3 .021 .030	.030 .030	.007 .016	.007 .016	.007 .016	.007 .016	.007 .016
4 .014 .010	.010 .010	.004 .009	.004 .009	.004 .009	.004 .009	.004 .009
5 .001 .002	.002 .002	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001
6 .001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001
7 .001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001
8 .001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001
9 .001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001
10 .001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001	.001 .001

*** WALL PRESSURES, PER RADIAN ***

WALL NO. W1 W2 W3 W4 W5 W6 W7 W8 W9 W10

GAP FRACTION N CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG

1 1.500 -1.021 3.343 -1.563 -1.967 3.433 -2.102 -1.021 1.900 3.163

2 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

3 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

4 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

5 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

6 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

7 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

8 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

9 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

10 .003 .003 .263 .168 .862 1.414 .237 .330 .654 .426

*** STABILITY PARAMETER ***

* XI = .6251 *

ORIGINAL PAGE IS
OF POOR QUALITY

OCWI PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 162 ALPHA-MCL = 6.0 PDP RUN-PT 32.01
HUN 32 ALPHA-PAR = 2.0 Q-COMP = 32567
POINT 1 SIGMA = -9.0 V-REF = 200.14
COMPUTED FREQUENCY = 9.00, K = .0712

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012			.062			.148			.261			.392			.530			.661		
	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	
1	35.774	335.24	12.467	336.68	7.570	340.03	5.005	346.00	3.506	359.81	3.253	11.63	2.648	31.23							
2	3.267	188.39	1.053	120.59	.343	158.17	.206	136.14	.151	133.56	.179	168.32	.021	21.44							
3	4.079	275.18	.444	24.34	.101	280.00	.063	297.18	.158	263.51	.032	289.91	.109	243.26							
4	.636	233.79	.243	248.18	.373	318.41	.087	307.69	.028	153.40	.025	89.40	.020	139.36							
5	.938	213.62	.054	147.50	.012	317.51	.037	170.45	.025	22.89	.034	343.59	.034	181.92							
6	.383	89.30	.090	256.74	.014	125.03	.027	187.99	.020	45.22	.030	188.62	.011	238.06							
7	.111	112.08	.060	29.38	.088	119.78	.044	107.51	.002	240.18	.014	87.82	.015	164.66							
8	.259	158.71	.058	173.57	.042	192.80	.017	252.65	.037	148.73	.023	217.82	.011	339.01							
9	.113	151.91	.039	142.11	.051	116.94	.027	171.96	.016	312.36	.009	319.89									
10	.205	279.15	.049	239.25	.051	270.09	.031	277.44	.015												

X =	.774			.260			.910			CN-MAG			PHIN			N			CM-MAG			PHIM		
	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	PHI	DELCPM	PHI	
1	2.071	38.12	1.170	44.68	1.586	44.42	.662	351.73	.277	173.73	.169	284.24	.049	307.98	1	1.282	330.81	.091	177.37	.064	287.07	.018	301.33	
2	.062	215.00	.034	27.46	.022	249.38	.016	19.58	.014	19.58	.012	188.61	.012	188.61	2	.091	287.07	.005	190.13	.004	114.73	.004	130.05	
3	.037	304.56	.014	117.90	.016	295.78	.004	172.73	.004	172.73	.013	190.23	.021	147.88	3	.007	267.32							
4	.021	174.43	.006	43.29	.004	218.24	.006	112.90							4									
5	.002	305.93	.006	192.80	.004	186.24									5									
6	.013	225.74	.012	320.74	.004	186.24									6									
7	.015	175.61	.003	244.57	.004	112.90									7									
8	.006		.006	88.42											8									
9															9									
10															10									

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	.125			.000			.125			.530			.661			.6251		
	CP-MAG	PHI	PHI	CP-MAG	PHI	PHI	CP-MAG	PHI	PHI	CP-MAG	PHI	PHI	CP-MAG	PHI	PHI	CP-MAG	PHI	
1	2.209	312.79	3.390	350.45	12.450	163.99	2.167	194.36	.406	305.76	.179	168.32	.021	21.44	1	1.282	330.81	
2	.106	15.39	.983	351.11	1.225	238.64	.406	305.76	.179	168.32	.021	21.44	.020	139.36	2	.091	287.07	
3	.554	89.30	.312	352.52	1.225	238.64	.406	305.76	.179	168.32	.021	21.44	.020	139.36	3	.007	267.32	
4	.128	118.29	.073	350.52	.484	200.86	.179	168.32	.021	21.44	.020	139.36	.020	139.36	4			
5	.080	343.50	.152	300.52	.134	194.86	.073	284.57	.039	176.20	.025	89.40	.034	343.59	5			
6	.174	212.49	.210	131.22	.178	303.79	.039	176.20	.025	89.40	.034	343.59	.034	343.59	6			
7	.050	66.10	.093	328.11	.134	345.77	.025	89.40	.034	343.59	.034	343.59	.034	343.59	7			
8	.034	131.67	.041	304.03	.044	309.14	.034	343.59	.034	343.59	.034	343.59	.034	343.59	8			
9	.043	178.81	.007	101.03	.075	344.99	.034	343.59	.034	343.59	.034	343.59	.034	343.59	9			
10	.020	232.92	.045	159.15			.034	343.59	.034	343.59	.034	343.59	.034	343.59	10			

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTRE BLADE DATA, WALL STATIONS

FILE 164 ALPHA-MCL = 6.0 POP RUN-PT 32.03
RUM 32 ALPHA-PAR = 2.0 O-COMP = 32862
POINT 33 SIGMA = -90.0 V-REF = 201.08
COMPUTED FREQUENCY = 15.47, K = .1209

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG							
1	23	1.190	11.644	-6.322	2.196	-3.923	.740	-2.816	-.135	-2.524	-.786	-2.456	-1.345	-2.137	-1.636
2	1	1.335	3.269	-.224	1.022	.009	.079	-.044	.104	-.022	.174	-.081	.229	.051	.270
3	59	1.591	3.790	-.001	.322	.002	.061	-.015	.041	.034	.059	-.040	.002	-.034	.008
4	36	1.628	4.16	.054	.61	-.18	1.36	.030	.114	.055	.023	.036	.053	.054	.055
5	83	1.683	4.47	.044	.56	.25	.40	.041	.052	.007	.023	.024	-.003	.002	-.043
6	112	1.744	4.74	-.045	.53	.09	.27	.005	.012	.018	-.002	.010	-.006	.019	-.002
7	185	1.803	5.01	.009	.51	.13	.16	.008	.029	.032	.034	.022	.016	.016	.002
8	353	1.853	5.23	.017	.42	.03	.04	.016	.013	.006	.009	.011	.017	.009	.002
9	665	1.903	5.44	.021	.31	.01	.04	.014	.001	.007	-.005	.011	.007	.015	.007

X	N	.774-UPPER CPREAL CPIMAG	.060-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG		
1	1	-1.729	-1.373	-1.220	-7.916	4.658	2.956	-1.911	1.884	-1.303
2	53	-1.637	-0.33	-0.062	-1.186	-0.500	-0.113	-0.309	-0.845	-0.002
3	104	-1.556	0.04	0.066	0.046	0.211	-0.072	0.008	0.065	0.002
4	159	-1.456	0.039	0.09	0.081	0.30	0.060	0.029	0.052	0.034
5	207	-1.357	0.009	0.05	0.008	0.37	0.017	0.035	0.024	0.013
6	254	-1.257	0.007	0.03	0.030	0.23	-0.010	0.010	0.006	0.017
7	301	-1.157	0.006	0.06	0.030	0.26	0.018	0.008	0.010	0.007
8	348	-1.057	0.004	0.03	0.015	0.265	0.027	0.009	0.027	0.017
9	395	-0.957	-0.001	0.008	0.006	0.05	-0.010	0.029	0.016	0.023
10	442	-0.857	-0.008	0.00	-0.009	0.03	-0.015	0.009	0.002	0.002

X =	N	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG	774-LOWER CPREAL CPIMAG	860-LOWER CPREAL CPIMAG	910-LOWER CPREAL CPIMAG
1	1	0.983	-0.701	1.66	-0.127	-0.607	-0.15
2	53	0.912	0.283	1.26	0.095	-0.571	-0.138
3	104	0.839	0.002	1.42	-0.021	-0.571	-0.108
4	159	0.759	0.035	1.09	0.007	-0.571	-0.071
5	207	0.679	0.055	0.79	0.046	-0.571	-0.058
6	254	0.599	0.079	0.51	0.028	-0.571	-0.041
7	301	0.519	0.044	0.23	0.007	-0.571	-0.013
8	348	0.439	0.021	0.02	0.001	-0.571	-0.004
9	395	0.359	0.007	0.00	0.003	-0.571	-0.000
10	442	0.279	0.000	0.00	0.001	-0.571	-0.000

ORIGINAL FILED IN
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 164 ALPHA-MCL = 6.0 POP RUN-PI 32.03
ROUT 32 ALPHA-PAR = 2.0 C-COMP = 32868
POINT 33 SIGMA = 90.0 V-REF = 201.08
COMPUTED FREQUENCY = 15.47, N = 1209

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PLR RADIAN ***

X	N	.012-UPPER CP-MAG	PHI	.062-UPPER CP-MAG	PHI	.148-UPPER CP-MAG	PHI	.261-UPPER CP-MAG	PHI	.392-UPPER CP-MAG	PHI	.530-UPPER CP-MAG	PHI	.661-UPPER CP-MAG	PHI
1	25	1361	153.34	6.692	100.95	3.992	169.31	2.819	182.75	2.644	197.29	2.840	208.71	2.691	217.43
2	3	361	348.81	.246	24.53	.083	83.69	.113	113.21	.176	97.27	.243	170.48	.274	219.23
3	1	836	81.14	.032	92.65	.561	88.04	.044	109.79	.066	64.43	.040	177.37	.035	166.15
4	5	754	146.52	.081	48.82	.137	97.73	.118	175.44	.065	22.65	.077	43.20	.077	45.19
5	4	364	358.59	.060	336.94	.042	286.03	.066	33.53	.025	253.59	.043	270.40	.043	275.50
6	7	.251	251.50	.071	51.76	.027	339.98	.021	305.75	.006	346.48	.005	346.65	.019	354.07
7	6	.029	302.77	.056	143.52	.024	290.96	.013	248.18	.006	202.25	.011	157.61	.013	171.09
8	9	.185	180.27	.010	8.67	.022	46.27	.030	74.52	.047	49.24	.020	35.74	.016	352.39
9	8	.116	197.29	.020	324.59	.009	22.47	.021	39.75	.031	57.08	.020	61.05	.027	61.05
10	0	.079	34.17	.021	357.19	.013	17.47	.014	356.29	.008	322.14	.013	327.81	.016	335.33

X	N	= 774-UPPER		660-UPPER		910-UPPER		012-LOWER		062-LOWER		146-LOWER		261-LOWER	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	284	220.51	1.664	222.39	1.578	219.35	9.246	328.89	5.501	327.65	3.520	327.11	2.360	326.47
2	.293	91.32	.314	99.79	.035	171.55	.061	181.93	.089	.589	148.15	.072	110.13	.506	181.81
3	.040	174.27	.040	177.19	.083	176.88	.023	220.38	.039	.211	357.48	.036	186.58	.062	332.38
4	.078	44.69	.062	37.86	.041	37.28	.023	251.18	.028	.033	216.42	.009	25.64	.036	312.07
5	.039	279.58	.042	282.39	.017	282.42	.034	210.79	.027	.039	210.50	.014	295.24	.014	242.32
6	.007	78.13	.007	323.11	.008	330.57	.038	210.61	.027	.027	17.83	.018	227.02	.012	232.89
7	.021	15.28	.027	32.31	.020	42.20	.015	44.61	.026	.026	7.77	.028	17.06	.032	31.87
8	.024	82.68	.028	14.90	.024	82.09	.051	96.35	.037	.037	98.46	.030	110.05	.028	131.62
9	.014	326.73	.012	93.26	.012	311.11	.027	234.86	.015	.015	232.30	.010	242.90	.006	246.99

X =	392-LOWER CP-MAG	PHI	530-LOWER CP-MAG	PHI	661-LOWER CP-MAG	PHI	774-LOWER CP-MAG	PHI	860-LOWER CP-MAG	PHI	910-LOWER CP-MAG	PHI
1	1.207	324.51	.829	323.02	.209	322.56	.110	210.05	.355	197.25	.056	285.97
2	.283	182.26	.342	192.62	.274	62.91	.284	104.21	.223	104.82	.348	176.94
3	.059	35.39	.085	108.17	.144	189.92	.027	104.99	.096	367.77	.071	233.42
4	.064	298.15	.094	43.09	.069	330.30	.060	298.34	.029	287.26	.078	308.59
5	.015	248.08	.018	295.44	.011	358.74	.007	179.84	.029	267.37	.018	294.18
6	.010	46.08	.018	210.66	.004	126.54	.005	80.88	.005	142.81	.033	263.50
7	.030	15.38	.011	21.18	.004	126.54	.005	80.88	.005	142.81	.033	263.50
8	.021	111.92	.026	125.51	.026	117.18	.043	27.14	.027	90.72	.036	28.59
9	.005	255.31	.021	88.02	.021	88.02	.019	97.64	.017	90.72	.018	102.15
10			.005	268.26	.011	280.61	.007	279.34	.005	311.17	.035	290.02

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*** WALL PRESSURES, PER RADIAN ***
WALL NO.      W1      W2      W4      W6      W10
GAP FRACTION N CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG
***** STABILITY PARAMETER *****
          *      * XI = .6561 *
          *      *

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MODE 1 -- CENTER PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 164 ALPHA-MCL = 6.0 PDP RUN.PI 32.03
RUN 32 ALPHA-PR = 2.0 Q-COMP = 32868
POINT 3 SIGMA = -90. V-REF = 201.08
COMPUTED FREQUENCY = 15.47, M = .1209
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012		.062		.148		.261		.392		.530		.661	
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	35.175	332.17	12.116	334.99	7.372	335.92	4.830	346.67	3.508	1.339	3.221	15.18	2.753	33.22
2	53.1	174.81	.75	163.86	.260	117.96	.199	90.04	.109	84.79	.148	130.73	.079	30.60
3	88.2	260.56	.216	349.08	.101	223.39	.067	220.84	.107	215.21	.047	197.30	.113	196.97
4	80.4	331.86	.118	224.97	.133	306.06	.083	225.77	.014	100.68	.033	142.62	.021	283.82
5	372	182.03	.021	150.39	.037	45.91	.030	124.22	.026	336.35	.040	321.97	.044	278.65
6	236	76.56	.099	127.18	.035	181.88	.019	167.38	.026	201.71	.020	184.56	.029	266.95
7	336	53.68	.075	347.76	.030	72.78	.024	150.70	.016	37.19	.019	359.74	.011	230.26
8	200	59.23	.017	7.24	.014	372.60	.023	328.22	.037	281.70	.025	171.00	.013	196.81
9	164	111.06	.053	114.59	.032	127.90	.033	162.89	.017	144.38	.012	168.14	.003	195.16
10	105	219.57	.033	199.87	.022	217.01	.017	194.50	.008	179.63				

X =	.774	.F60	.910							
N	DELCPM	PHI	DELCPM	PHI	N	CM-MAG	PHIN	N	CM-MAG	PHIM
1	2.176	41.45	1.317	54.21	1	4	351.64	1	1.253	328.42
2	.017	21.05	.046	247.60	2	.157	151.50	2	.064	264.22
3	.040	33.64	.039	31.35	3	.152	303.79	3	.016	181.28
4	.026	327.19	.015	30.60	4	.052	121.06	4	.007	133.08
5	.024	180.14	.004	350.73	5	.021	192.60	5	.003	126.51
6	.002	252.16	.019	280.19	6	.021	17.47	6	.004	324.51
7	.022	34.53	.010	186.34	7	.017	356.86	7	.006	115.40
8	.007	220.53	.017	174.28	8	.015	144.93	8	.003	220.74
9	.016	175.09	.011	276.58	9	.015	196.10	9		
10			.006	148.30	10			10		

*** STABILITY PARAMETER

* XI = .6561

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.653	349.79	3.012	356.14	13.308	161.61	2.477	185.83	8.843	76.11	1.125	1.125	1.125	1.125
2	.547	109.29	.930	16.09	1.949	219.20	.064	105.13	.963	52.93	.632	217.35	.273	130.04
3	.057	210.47	.257	270.49	.687	147.84	.038	169.74	.632	217.35	.273	130.04	.164	358.22
4	.076	110.59	.165	31.25	.442	326.39	.110	61.07	.058	374.58	.062	170.80	.059	195.88
5	.011	36.82	.109	257.06	.189	214.20	.023	293.96	.058	374.58	.062	170.80	.059	195.88
6	.011	61.59	.027	148.57	.051	203.84	.023	13.96	.058	374.58	.062	170.80	.059	195.88
7	.041	202.64	.019	309.05	.099	284.44	.023	346.04	.058	374.58	.062	170.80	.059	195.88
8	.039	195.79	.043	244.57	.104	347.52	.023	62.00	.058	374.58	.062	170.80	.059	195.88
9	.039	195.79	.043	244.57	.104	347.52	.023	62.00	.058	374.58	.062	170.80	.059	195.88
10	.050	129.00	.016	311.40	.055	335.80	.013	527.98	.009	143.47				

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 --- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 166 ALPHA-PCL = 6.0 PDP RUN.PI 32.05
RUN 32 ALPHA-PAR = 2.0 Q-COMP = .32498
POINT 5 SIGMA = -90. V-REF = 199.90
COMPUTED FREQUENCY = 19.08, K = .1499

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	062-UPPER	148-UPPER	261-UPPER	392-UPPER	530-UPPER	561-UPPER
1	22	667	12.148	-6.152	-3.640	-2.546	-2.235	-2.153	-1.793
2	1	447	-6.220	.142	.071	-.010	.001	.118	.084
3	1	265	3.733	.059	.069	-.042	.078	.007	.004
4	5	582	-.036	.056	.046	-.002	.005	.001	.004
5	1	70	-.016	.043	.027	.001	.000	.001	.004
6	2	241	-.024	.053	.011	-.009	-.006	.001	.004
7	6	38	-.038	.052	.005	-.008	.008	.007	.006
8	1	25	-.034	.011	.006	-.014	.001	.004	.006
9	1	30	-.063	.002	.012	-.003	.008	.001	.006
10	1	65	-.031	.002	.000	-.004	.003	.003	.017

X	N	CPREAL	CPIMAG	062-UPPER	148-UPPER	261-UPPER	392-UPPER	530-UPPER	561-UPPER
1	22	667	12.148	-6.152	-3.640	-2.546	-2.235	-2.153	-1.793
2	1	447	-6.220	.142	.071	-.010	.001	.118	.084
3	1	265	3.733	.059	.069	-.042	.078	.007	.004
4	5	582	-.036	.056	.046	-.002	.005	.001	.004
5	1	70	-.016	.043	.027	.001	.000	.001	.004
6	2	241	-.024	.053	.011	-.009	-.006	.001	.004
7	6	38	-.038	.052	.005	-.008	.008	.007	.006
8	1	25	-.034	.011	.006	-.014	.001	.004	.006
9	1	30	-.063	.002	.012	-.003	.008	.001	.006
10	1	65	-.031	.002	.000	-.004	.003	.003	.017

X	N	CPREAL	CPIMAG	062-UPPER	148-UPPER	261-UPPER	392-UPPER	530-UPPER	561-UPPER
1	22	667	12.148	-6.152	-3.640	-2.546	-2.235	-2.153	-1.793
2	1	447	-6.220	.142	.071	-.010	.001	.118	.084
3	1	265	3.733	.059	.069	-.042	.078	.007	.004
4	5	582	-.036	.056	.046	-.002	.005	.001	.004
5	1	70	-.016	.043	.027	.001	.000	.001	.004
6	2	241	-.024	.053	.011	-.009	-.006	.001	.004
7	6	38	-.038	.052	.005	-.008	.008	.007	.006
8	1	25	-.034	.011	.006	-.014	.001	.004	.006
9	1	30	-.063	.002	.012	-.003	.008	.001	.006
10	1	65	-.031	.002	.000	-.004	.003	.003	.017

MODE 1 -- 9CWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 169 ALPHA-MCL = 2.0 PDP RUNPT 32.75
RUL 32 ALPHA-PR = 2.0 C-COMP = 32495
PCIT 3 SIGMA = -90. V-REF = 199.90
COMPUTED FREQUENCY = 19.06, K = .1499

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	717	151.61	6.558	159.66	3.700	169.68	2.559	185.93	2.430	203.14	2.621	218.75
2	1	574	326.92	1.250	354.60	1.173	250.40	1.142	266.02	.889	270.42	.126	328.72
3	1	542	711.28	1.011	305.70	.677	225.88	.643	7.87	.580	13.38	.047	278.47
4	3	669	153.41	.127	301.34	.080	125.52	.047	92.55	.444	276.88	.009	262.89
5	4	171	354.45	.048	26.19	.027	178.43	.017	273.68	.042	164.50	.028	178.52
6	7	241	269.48	.040	49.32	.016	312.80	.015	233.44	.006	173.24	.008	261.87
7	8	328	95.27	.070	138.49	.008	311.82	.018	204.85	.019	116.26	.009	126.25
8	9	129	145.16	.031	249.98	.008	205.72	.015	199.45	.008	181.10	.002	127.65
9	10	670	113.35	.014	296.31	.012	161.08	.003	198.45	.008	181.10	.002	127.65
10		372	205.31	.012	260.92	.005	267.36	.007	327.94	.012	255.60	.007	297.85

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	141	224.93	1.708	234.68	1.403	233.75	9.859	328.37	6.398	328.47	3.967	328.47
2	1	054	276.98	.049	270.53	.051	107.64	1.106	158.72	.399	169.89	.047	328.47
3	3	008	210.58	.013	230.69	.011	272.41	.145	212.59	.187	323.46	.053	216.36
4	5	020	191.50	.018	183.58	.016	186.74	.068	111.21	.112	175.63	.037	178.36
5	6	010	184.57	.008	200.92	.013	197.00	.032	332.32	.063	347.63	.029	354.86
6	7	005	264.57	.009	253.08	.007	287.68	.046	174.64	.035	165.22	.016	134.13
7	8	013	152.56	.012	141.43	.029	149.60	.034	324.33	.029	333.25	.017	129.27
8	9	010	315.33	.012	316.17	.012	316.17	.054	137.33	.040	303.80	.034	139.5
9	10	015	333.11	.018	336.66	.013	334.68	.042	251.63	.036	52.77	.047	55.88

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	520	324.76	1.185	332.56	.553	343.84	.300	341.95	.596	218.23	.458	326.28
2	3	052	234.76	.074	232.04	.067	203.87	.047	350.40	.349	217.58	.032	242.22
3	4	033	189.80	.025	175.24	.046	206.07	.048	209.39	.016	258.70	.025	236.34
4	5	009	2.14	.007	261.99	.038	69.34	.015	171.05	.015	164.39	.038	107.34
5	6	010	147.15	.019	115.53	.011	253.15	.009	131.66	.011	225.34	.038	183.08
6	7	019	359.18	.005	20.09	.003	43.36	.010	104.08	.004	69.17	.032	172.74
7	8	013	325.15	.020	166.66	.022	167.98	.016	187.99	.012	191.97	.039	172.74
8	9	013	325.15	.016	331.73	.013	167.22	.012	353.20	.006	1.59	.039	172.74
9	10	013	325.15	.021	80.07	.019	80.40	.014	31.13	.010	101.10	.038	172.74

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 166 ALPHA-WCL = 6.0 PDP RUN-PI 32.05
HUR 32 ALPHA-BAR = 2.0 Q-COMP = 32490
POINT S SIGMA = -90. V-REF = 199.90
COMPUTED FREQUENCY = 19.08, K = .1499

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.148		.261		.392		.530		.661	
		DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	1	31.062	-17.317	31.325	-5.505	7.019	-2.740	4.813	-1.087	3.548	.190	3.205	.948	2.324	1.637
2	2	-2.524	.367	-1.535	.276	-1.136	.212	.059	.177	.063	.120	-.039	.077	-.104	-.054
3	3	-1.388	-3.811	.091	-.029	.038	-.083	-.085	-.049	-.108	-.063	-.053	-.012	-.093	-.002
4	4	-1.557	-.267	.168	.101	.050	-.059	.018	-.054	-.038	-.039	-.027	-.008	-.032	-.022
5	5	-1.008	-.016	.050	.050	.022	.023	-.027	.023	-.002	.005	-.010	.025	.003	-.006
6	6	-.043	-.245	-.087	-.051	-.019	-.022	-.027	.004	-.016	-.017	-.010	-.006	.007	-.003
7	7	.031	-.348	-.078	-.039	-.031	-.026	-.012	.008	-.017	-.007	-.015	-.008	-.011	-.003
8	8	.035	-.370	-.019	.055	-.033	.029	.025	.016	.019	.030	.015	.009	-.014	-.007
9	9	.034	-.106	.021	.042	.024	.040	.004	.039	.009	.030	.010	.028	-.014	.012
10	10	.092	.064	.024	.040	.024	.040	.004	.039	.009	.030	.010	.028	-.014	.012

X	N	.774		.850		.910		.970		.990		.995		.999	
		DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	1	1.664	1.545	1.210	1.210	1.210	.875	.667	.667	.667	.667	.667	.667	.667	.667
2	2	.005	-.008	-.014	-.016	-.016	.030	.096	.096	.096	.096	.096	.096	.096	.096
3	3	.035	-.020	.009	.006	.006	.015	.015	.015	.015	.015	.015	.015	.015	.015
4	4	.005	.006	.006	.006	.006	.009	.009	.009	.009	.009	.009	.009	.009	.009
5	5	.005	.006	.006	.006	.006	.009	.009	.009	.009	.009	.009	.009	.009	.009
6	6	.005	.006	.006	.006	.006	.009	.009	.009	.009	.009	.009	.009	.009	.009
7	7	.005	.006	.006	.006	.006	.009	.009	.009	.009	.009	.009	.009	.009	.009
8	8	.005	.006	.006	.006	.006	.009	.009	.009	.009	.009	.009	.009	.009	.009
9	9	.005	.006	.006	.006	.006	.009	.009	.009	.009	.009	.009	.009	.009	.009
10	10	.005	.006	.006	.006	.006	.009	.009	.009	.009	.009	.009	.009	.009	.009

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	N	.125		.250		.375		.500		.625		.750		.875		.999	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	1.500	-1.275	3.267	-.301	-12.288	4.405	-2.056	.375	2.691	8.532	-.691	.656	-.493	.493	-.002	.002
2	2	.094	.267	1.091	-.117	-1.767	-1.531	.017	-.226	.656	.493	.442	.442	.442	.442	.442	.442
3	3	.051	-.023	.068	-.082	-.380	-.337	.037	.008	-.185	.141	.141	.141	.141	.141	.141	.141
4	4	.031	-.040	.022	-.034	.054	-.028	.034	.001	.048	.054	.048	.048	.048	.048	.048	.048
5	5	.023	-.030	.004	-.031	.012	-.024	.004	.001	.026	.026	.026	.026	.026	.026	.026	.026
6	6	.023	-.030	.004	-.031	.012	-.024	.004	.001	.026	.026	.026	.026	.026	.026	.026	.026
7	7	.023	-.030	.004	-.031	.012	-.024	.004	.001	.026	.026	.026	.026	.026	.026	.026	.026
8	8	.023	-.030	.004	-.031	.012	-.024	.004	.001	.026	.026	.026	.026	.026	.026	.026	.026
9	9	.023	-.030	.004	-.031	.012	-.024	.004	.001	.026	.026	.026	.026	.026	.026	.026	.026
10	10	.023	-.030	.004	-.031	.012	-.024	.004	.001	.026	.026	.026	.026	.026	.026	.026	.026

*** STABILITY PARAMETER

* XI = .6874

ORIGINAL PAGE IS
OF POOR QUALITY.

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS
FILE 160 ALPHA-MCL = 6.0 PDP RUN-PT 32.05
HUN 32 ALPHA-PAR = 2.0 Q-COMP = 32490
POINT 35 SIGMA = -90.0 V-REF = 199.90
COMPUTED FREQUENCY = 19.30, K = .1499

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	35.563	330.86	12.592	334.08	7.535	335.68	4.935	337.27	3.353	338.50	2.843	339.62	2.342	340.62	1.843	341.62
2	2.550	171.73	.602	132.71	.218	100.02	.187	71.53	.124	32.05	.093	32.05	.054	192.84	.027	154.32
3	4.056	249.99	.095	342.43	.159	211.47	.099	237.21	.051	134.76	.028	134.76	.026	105.48	.011	71.13
4	.618	334.43	.039	149.03	.060	279.33	.032	96.27	.025	115.91	.012	115.91	.011	152.72	.010	144.88
5	.109	188.30	.039	298.01	.056	356.60	.028	96.27	.025	115.91	.012	115.91	.011	152.72	.010	144.88
6	.249	100.06	.039	210.49	.032	133.46	.028	96.27	.025	115.91	.012	115.91	.011	152.72	.010	144.88
7	.057	302.73	.039	322.88	.032	133.46	.028	96.27	.025	115.91	.012	115.91	.011	152.72	.010	144.88
8	.110	339.75	.039	109.33	.032	133.46	.028	96.27	.025	115.91	.012	115.91	.011	152.72	.010	144.88
9	.119	296.79	.039	295.72	.032	133.46	.028	96.27	.025	115.91	.012	115.91	.011	152.72	.010	144.88
10	.112	35.00	.039	59.76	.032	133.46	.028	96.27	.025	115.91	.012	115.91	.011	152.72	.010	144.88

X =	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.271	42.89	1.427	58.05	1.493	75.89	1.493	75.89	1.493	75.89	1.493	75.89	1.493	75.89	1.493	75.89
2	.030	278.86	.034	14.65	.023	115.88	.023	115.88	.023	115.88	.023	115.88	.023	115.88	.023	115.88
3	.055	8.02	.008	110.71	.015	144.20	.015	144.20	.015	144.20	.015	144.20	.015	144.20	.015	144.20
4	.040	209.08	.006	55.60	.016	35.80	.016	35.80	.016	35.80	.016	35.80	.016	35.80	.016	35.80
5	.009	67.23	.005	263.91	.005	41.00	.005	41.00	.005	41.00	.005	41.00	.005	41.00	.005	41.00
6	.015	97.94	.012	271.91	.007	91.81	.007	91.81	.007	91.81	.007	91.81	.007	91.81	.007	91.81
7	.010	240.71	.010	258.40	.005	286.56	.005	286.56	.005	286.56	.005	286.56	.005	286.56	.005	286.56
8	.007	48.07	.009	100.97	.008	106.79	.008	106.79	.008	106.79	.008	106.79	.008	106.79	.008	106.79
9	.013	150.95	.017	182.01	.014	182.57	.014	182.57	.014	182.57	.014	182.57	.014	182.57	.014	182.57
10																

*** STABILITY PARAMETER ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.908	319.63	3.281	354.74	13.054	160.26	2.099	190.34	8.946	72.49	8.946	72.49	8.946	72.49	8.946	72.49
2	.283	370.53	1.097	284.87	2.338	157.33	.053	374.42	.819	36.43	.819	36.43	.819	36.43	.819	36.43
3	.051	358.65	.269	273.85	.508	221.60	.008	182.85	.233	211.43	.233	211.43	.233	211.43	.233	211.43
4	.079	197.09	.082	503.44	.069	291.59	.039	170.21	.098	354.86	.098	354.86	.098	354.86	.098	354.86
5	.055	124.02	.031	97.13	.030	293.70	.004	162.77	.073	311.49	.073	311.49	.073	311.49	.073	311.49
6	.036	231.67	.009	325.93	.036	222.21	.006	229.78	.028	160.09	.028	160.09	.028	160.09	.028	160.09
7	.024	160.63	.024	174.81	.069	298.62	.020	231.27	.014	132.15	.014	132.15	.014	132.15	.014	132.15
8	.029	113.52	.017	45.44	.029	293.02	.010	26.18	.034	325.32	.034	325.32	.034	325.32	.034	325.32
9	.033	119.52	.028	45.44	.035	293.02	.010	26.18	.034	325.32	.034	325.32	.034	325.32	.034	325.32
10																

ORIGINAL PAGE IS
OF POOR QUALITY

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MODE 1  -- CCMPI PERIODICITY TEST
          CENTRE PLACE DATA, WALL STATIONS
144      ALPHA-VCL = 6.0      POP RUNCT = 29.03
129      ALPHA-CAP = 2.0      C-CMPB = .32005
1      CPUTFEC SIGMA = -45.   V-REF = 198.33
          FREQUENCY = 9.07,  F = .6718
          EIGEN ***

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER PAGIAN ***
COMPUCE

[illegible]

X	=.774-UPPER		.660-UPPER		.910-UPPER		.012-LOWER		.062-LOWER		.148-LOWER		.261-LOWER	
	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	-.191	-1.815	-.010	1.027	-.032	-1.496	5.031	-5.165	3.359	-3.261	2.254	-2.449	1.547	-1.849
2	-.234	-1.752	-.010	1.049	-.002	-1.444	5.031	-5.165	3.359	-3.261	2.254	-2.449	1.547	-1.849
3	-.251	-1.688	-.010	1.073	-.002	-1.444	5.031	-5.165	3.359	-3.261	2.254	-2.449	1.547	-1.849
4	-.038	1.946	-.054	1.345	-.043	-.952	0.243	0.199	0.361	0.422	0.234	0.189	0.244	0.200
5	-.038	1.946	-.054	1.345	-.043	-.952	0.243	0.199	0.361	0.422	0.234	0.189	0.244	0.200
6	-.054	1.939	-.068	1.345	-.068	-.952	0.243	0.199	0.361	0.422	0.234	0.189	0.244	0.200
7	-.027	1.903	-.027	1.345	-.027	-.952	0.243	0.199	0.361	0.422	0.234	0.189	0.244	0.200
8	-.047	1.903	-.047	1.345	-.047	-.952	0.243	0.199	0.361	0.422	0.234	0.189	0.244	0.200
9	-.047	1.903	-.047	1.345	-.047	-.952	0.243	0.199	0.361	0.422	0.234	0.189	0.244	0.200
10	-.011	1.903	-.011	1.345	-.011	-.952	0.243	0.199	0.361	0.422	0.234	0.189	0.244	0.200

X =	.392-LOWER	.520-LOWER	.651-LOWER	.774-LOWER	.880-LOWER	.912-LOWER
N	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL
1	.987	-1.446	.667	.488	.177	.601
2	.046	.284	.805	.532	.322	.247
3	.327	.271	.231	.282	.229	.242
4	.034	.275	.242	.248	.342	.053
5	.031	.275	.246	.248	.369	.029
6	.037	.275	.246	.248	.351	.023
7	.032	.275	.246	.248	.351	.023
8	.037	.275	.246	.248	.351	.023
9	.037	.275	.246	.248	.351	.023
10	.037	.275	.246	.248	.351	.023

MODE 1 --- OCWI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 144 ALPHA-WCL = 6.0 POP RUN-PT 29.03
RUN 29 ALPHA-PAR = 2.0 Q-COMP = .32009
POINT 1 SIGMA = -45. V-REF = 198.39
COMPUTED FREQUENCY = 9.07, K = .C718
FOUPLER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	23	.365	145.73	5.075	156.82	2.777	168.76	1.715	191.75	1.562	222.28	1.824	243.40
2	23	.333	241.48	.219	346.59	.023	274.06	.026	65.69	.001	49.55	.167	237.46
3	1	.789	56.61	.311	226.19	.310	226.07	.271	224.85	.294	226.48	.369	224.16
4	5	.124	348.54	.031	73.54	.035	354.95	.062	319.86	.193	296.48	.069	316.54
5	4	.473	190.54	.064	42.87	.076	24.71	.071	23.46	.005	68.65	.083	26.94
6	7	.124	288.02	.020	220.76	.073	36.83	.039	65.96	.009	37.63	.030	197.33
7	8	.345	146.91	.082	186.13	.077	230.05	.012	176.96	.009	160.16	.033	178.41
8	9	.193	336.18	.021	342.65	.077	170.99	.024	314.34	.062	135.08	.015	165.19
9	10	.055	21.50	.017	208.43	.001	322.35	.010	212.59	.009	295.62	.015	325.41
						.011	309.43						

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	.882	264.18	1.687	269.66	1.496	271.50	7.941	318.41	4.698	316.05	3.328	312.62
2	3	.154	77.25	.130	266.13	.146	290.74	.702	188.23	.329	141.82	.142	77.68
3	5	.351	224.24	.350	224.94	.357	223.04	.289	288.89	.160	247.53	.316	216.79
4	5	.060	50.69	.067	319.04	.068	312.56	.105	289.24	.124	258.88	.090	295.37
5	6	.075	333.84	.075	51.27	.068	51.01	.073	71.43	.081	66.89	.085	64.88
6	7	.029	173.84	.030	168.50	.030	23.93	.095	11.01	.082	180.90	.084	19.27
7	8	.047	184.61	.032	179.09	.030	155.05	.059	182.59	.043	155.73	.039	189.69
8	9	.012	181.61	.010	179.09	.046	177.41	.019	119.09	.031	174.24	.041	159.69
9	10	.011	341.63	.009	180.23	.009	180.23	.037	175.56	.023	174.24	.015	181.75
				.011	338.28	.011	338.28	.030	175.56	.019	358.50	.013	356.66

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	.603	308.03	1.559	367.74	1.117	336.64	.859	304.60	.844	287.12	.728	328.58
2	3	.111	65.13	.126	69.75	.125	376.05	.121	47.55	.117	297.28	.148	94.58
3	4	.302	219.52	.367	222.37	.358	216.53	.338	227.54	.316	225.29	.362	221.91
4	5	.068	300.52	.082	299.16	.071	324.16	.082	287.54	.071	314.04	.064	303.44
5	6	.057	53.01	.073	53.65	.063	46.52	.063	50.25	.060	45.29	.073	45.75
6	7	.031	184.09	.034	26.13	.069	23.67	.084	28.86	.030	169.25	.028	158.52
7	8	.046	169.24	.039	181.39	.034	163.97	.032	170.86	.030	177.00	.048	180.53
8	9	.304	172.57	.059	172.99	.056	177.96	.056	174.89	.051	177.00	.034	157.35
9	10	.308	332.88	.007	179.77	.009	159.10	.005	195.58	.089	159.23	.004	343.68
				.009	342.21	.009	332.86	.009	346.44	.007	10.13		

ORIGINAL PRICE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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FILE 144      ALPHA-MCL = 6.0
RUN 29        ALPHA-FAR = 2.0
POINT 1       SIGMA = -45.
              PDP RUN.PT = 29.03
              Q-COMP = 3209
              V-REF = 198.39

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 9.007, R =

X =	.012		.462		.149		.261		.392		.530		.661												
	N	DELCPH DELCPI	N	DELCPH DELCPI	N	DELCPH DELCPI	N	DELCPH DELCPI	N	DELCPH DELCPI	N	DELCPH DELCPI	N	DELCPH DELCPI											
1	25	505	-18	435	8	049	-5	258	4	977	-2	990	3	227	-1	509	2	143	1	742	391	1	108	1	082
2	3	241	-1	667	-	472	0	254	0	638	0	161	0	338	0	006	0	319	0	089	0	021	0	020	
3	4	085	0	155	-	154	0	277	0	030	0	034	0	052	0	009	0	030	0	038	0	008	0	000	
4	5	097	0	155	-	057	0	116	0	000	0	069	0	036	0	027	0	042	0	012	0	005	0	007	
5	6	558	0	155	-	014	0	032	0	031	0	016	0	054	0	004	0	012	0	004	0	002	0	009	
6	7	097	0	155	-	031	0	032	0	020	0	028	0	020	0	009	0	022	0	005	0	004	0	005	
7	8	274	-1	171	-	026	0	022	0	036	0	002	0	029	0	005	0	015	0	006	0	002	0	005	
8	9	020	-	051	-	056	0	009	0	020	0	004	0	027	0	002	0	006	0	002	0	003	0	005	
9	0	222	-	051	-	034	0	006	0	008	0	008	0	019	0	002	0	003	0	004	0	005	0	002	

X	774		95U		91U		N	CNREAL		CNIMAG		N	CNREAL		CNIMAG	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP		DELCP	DELCP	DELCP	DELCP		DELCP	DELCP	DELCP	DELCP
1	0.678	1.1665	1.87	0.582	1.116	0.000	1	3.042	0.995	0.000	0.000	1	3.042	0.995	0.000	0.000
2	0.048	1.005	0.000	0.000	0.000	0.000	2	0.045	0.000	0.000	0.000	2	0.045	0.000	0.000	0.000
3	0.023	0.000	0.000	0.000	0.000	0.000	3	0.000	0.000	0.000	0.000	3	0.000	0.000	0.000	0.000
4	0.024	0.000	0.000	0.000	0.000	0.000	4	0.000	0.000	0.000	0.000	4	0.000	0.000	0.000	0.000
5	0.032	0.000	0.000	0.000	0.000	0.000	5	0.000	0.000	0.000	0.000	5	0.000	0.000	0.000	0.000
6	0.031	0.000	0.000	0.000	0.000	0.000	6	0.000	0.000	0.000	0.000	6	0.000	0.000	0.000	0.000
7	0.033	0.000	0.000	0.000	0.000	0.000	7	0.000	0.000	0.000	0.000	7	0.000	0.000	0.000	0.000
8	0.033	0.000	0.000	0.000	0.000	0.000	8	0.000	0.000	0.000	0.000	8	0.000	0.000	0.000	0.000
9	0.031	0.000	0.000	0.000	0.000	0.000	9	0.000	0.000	0.000	0.000	9	0.000	0.000	0.000	0.000
10	0.032	0.000	0.000	0.000	0.000	0.000	10	0.000	0.000	0.000	0.000	10	0.000	0.000	0.000	0.000

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*** STABILITY PARAMETER
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*** WALL PRESSURES, PER RADIAN ***

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* * * * *
* * XI = .7034 * *
* * * * *
W10
1.125
CPREAL CPIMAG
W6
500
CPREAL CPIMAG
W4
125
CPREAL CPIMAG
W2
300
CPREAL CPIMAG
W1
-125
CPREAL CPIMAG
WALL NO.
GAP FRACTION N

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OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 144 ALPHA-MCL = 6.0 POP RUN-PI 29.03
HUN 29 ALPHA-PAR = 2.0 Q-COMP = 32009
POINT 1 SIGMA = -45.0 V-REF = 198.39
COMPUTED FREQUENCY = 9.07, K = .0718

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012		.062		.148		.261		.392		.530		.661	
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	31.47	324.14	9.613	326.84	5.806	329.03	3.558	335.07	2.154	354.36	1.895	129.50	1.548	44.34
2	.993	104.07	.536	151.67	.163	179.92	.103	68.38	.031	128.18	.090	169.14	.066	289.00
3	.083	233.90	.172	220.50	.051	138.05	.052	189.96	.036	145.37	.029	122.45	.057	159.92
4	.086	158.65	.129	243.97	.089	269.62	.028	257.38	.033	109.13	.012	252.98	.008	2.42
5	.426	10.62	.045	44.30	.049	146.92	.046	142.92	.023	278.83	.034	10.18	.008	357.08
6	.568	10.65	.031	314.40	.026	321.33	.054	355.57	.018	312.18	.010	122.24	.008	257.78
7	.151	130.27	.031	155.72	.029	110.17	.022	204.42	.023	190.83	.010	134.12	.010	114.52
8	.324	328.50	.064	121.43	.038	133.61	.026	350.28	.025	166.67	.003	204.99	.006	107.25
9	.229	159.35	.044	168.74	.020	168.70	.030	152.40	.006	196.47	.003	124.95	.008	62.83
10	.055	293.39	.035	12.41	.010	54.94	.019	5.70	.006	57.99	.007	124.95	.005	158.08

X =	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	N	CN-MAG	PHIN	N	CM-MAG	PHIM
1	1	1.349	59.79	.882	77.74	1.259	62.47	3	3.278	141.89	1	1.107	320.74
2	2	.077	358.46	.042	233.17	.009	174.04	2	.009	170.42	2	.038	113.74
3	3	.023	348.25	.007	257.64	.011	200.41	3	.022	250.99	3	.005	271.89
4	4	.041	235.14	.007	264.35	.008	352.72	4	.004	149.28	4	.010	152.18
5	5	.004	42.78	.010	280.80	.003	297.45	5	.015	149.28	5	.004	143.22
6	6	.010	6.64	.006	287.67	.003	228.98	6	.020	157.59	6	.009	346.68
7	7	.003	142.82	.006	61.73	.008	156.30	7	.003	351.03	7	.007	164.65
8	8	.012	133.58	.006	127.64	.003	228.98	8	.003	351.03	8	.003	351.03
9	9	.008	352.78	.006	127.64	.008	156.30	9	.003	351.03	9	.003	351.03
10	10	.003	146.63	.006	127.64	.008	156.30	10	.003	351.03	10	.003	351.03

*** STABILITY PARAMETER

* XI = .7034 *

WALL NO.	W1	W2	W4	W6	W10									
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI								
1	1.858	285.34	3.835	349.62	10.762	159.79	6.586	114.60	.899	114.29	.233	325.61	.038	51.24
2	.331	51.78	1.310	347.40	1.786	216.69	.108	352.55	.258	298.70	.011	53.56	.038	51.24
3	.455	219.68	.686	243.90	.691	181.71	.437	226.60	.233	325.61	.011	53.56	.038	51.24
4	.100	297.48	.327	287.75	.367	349.09	.092	315.74	.038	51.24	.011	53.56	.038	51.24
5	.091	60.36	.062	120.10	.186	12.01	.086	36.16	.038	51.24	.011	53.56	.038	51.24
6	.106	26.23	.095	27.44	.128	331.09	.086	36.16	.038	51.24	.011	53.56	.038	51.24
7	.053	198.90	.086	184.66	.078	320.70	.076	178.96	.047	231.78	.108	219.65	.025	344.87
8	.075	168.47	.084	155.31	.078	207.09	.076	178.96	.047	231.78	.108	219.65	.025	344.87
9	.006	246.70	.006	261.84	.078	344.95	.005	5.25	.025	344.87	.020	219.74	.020	219.74
10	.019	353.73	.024	60.45	.058	252.09	.002	258.22	.020	219.74	.020	219.74	.020	219.74

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 146 ALPHA-MCL = 6.0 POP RUN-PI 28.05
RUN 29 ALPHA-RAD = 2.0 O-COMP = 32138
POINT 33 SIGMA = -45.0 V-REF = 198.79
COMPUTED FREQUENCY = 15.46, K = .1221

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	17	.091	14.958	-.4361	2.466	-.4361	2.466	-.4361	2.466
2	17	.413	1.071	-.028	-.056	-.028	-.056	-.028	-.056
3	17	.425	1.071	-.042	-.038	-.042	-.038	-.042	-.038
4	17	.057	1.260	-.042	-.038	-.042	-.038	-.042	-.038
5	17	.279	1.44	-.042	-.038	-.042	-.038	-.042	-.038
6	17	.274	1.43	-.042	-.038	-.042	-.038	-.042	-.038
7	17	.050	1.038	-.042	-.038	-.042	-.038	-.042	-.038
8	17	.051	1.037	-.042	-.038	-.042	-.038	-.042	-.038
9	17	.061	1.037	-.042	-.038	-.042	-.038	-.042	-.038
10	17	.061	1.037	-.042	-.038	-.042	-.038	-.042	-.038

X	N	CPREAL	CPIMAG	.062-LOWER	.148-LOWER	.261-LOWER	.392-LOWER	.530-LOWER	.661-LOWER
1	17	.091	14.958	-.4361	2.466	-.4361	2.466	-.4361	2.466
2	17	.413	1.071	-.028	-.056	-.028	-.056	-.028	-.056
3	17	.425	1.071	-.042	-.038	-.042	-.038	-.042	-.038
4	17	.057	1.260	-.042	-.038	-.042	-.038	-.042	-.038
5	17	.279	1.44	-.042	-.038	-.042	-.038	-.042	-.038
6	17	.274	1.43	-.042	-.038	-.042	-.038	-.042	-.038
7	17	.050	1.038	-.042	-.038	-.042	-.038	-.042	-.038
8	17	.051	1.037	-.042	-.038	-.042	-.038	-.042	-.038
9	17	.061	1.037	-.042	-.038	-.042	-.038	-.042	-.038
10	17	.061	1.037	-.042	-.038	-.042	-.038	-.042	-.038

X	N	CPREAL	CPIMAG	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	17	.091	14.958	-.4361	2.466	-.4361	2.466	-.4361	2.466
2	17	.413	1.071	-.028	-.056	-.028	-.056	-.028	-.056
3	17	.425	1.071	-.042	-.038	-.042	-.038	-.042	-.038
4	17	.057	1.260	-.042	-.038	-.042	-.038	-.042	-.038
5	17	.279	1.44	-.042	-.038	-.042	-.038	-.042	-.038
6	17	.274	1.43	-.042	-.038	-.042	-.038	-.042	-.038
7	17	.050	1.038	-.042	-.038	-.042	-.038	-.042	-.038
8	17	.051	1.037	-.042	-.038	-.042	-.038	-.042	-.038
9	17	.061	1.037	-.042	-.038	-.042	-.038	-.042	-.038
10	17	.061	1.037	-.042	-.038	-.042	-.038	-.042	-.038

ORIGINAL PAGE IS
OF POOR QUALITY

OCMI PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 146 ALPHA-MCL = 6.0 PDP RUN-PT 29.05
RUN 29 ALPHA-BAR = 2.0 O-COMP = 32138
POINT 3 SIGMA = -45 V-REF = 196.79
COMPUTED FREQUENCY = 15.46, K = .1221
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	22	.012-UPPER	PHI	.062-UPPER	PHI	.146-UPPER	PHI	.261-UPPER	PHI	.392-UPPER	PHI	.530-UPPER	PHI	.661-UPPER	PHI		
2	22	138.61		4.752	148.73	2.483	159.82	1.440	184.96	1.315	219.63	1.528	243.76	1.756	259.11		
3	22	211.92		.062	243.62	.039	258.29	.045	330.31	.448	400.68	.543	437.11	.490	472.78		
4	22	336.92		.014	319.02	.019	328.09	.045	330.31	.059	343.77	.069	345.82	.059	347.78		
5	22	357.07		.035	340.02	.062	342.05	.045	342.05	.059	343.77	.069	345.82	.059	347.78		
6	22	377.04		.014	400.02	.019	328.09	.045	330.31	.059	343.77	.069	345.82	.059	347.78		
7	22	301.15		.018	412.23	.025	218.18	.046	116.01	.024	252.42	.015	292.05	.029	103.16		
8	22	069.21		.014	190.24	.025	218.18	.046	116.01	.024	252.42	.015	292.05	.029	103.16		
9	22	109.41		.031	209.95	.021	236.53	.028	227.24	.024	223.43	.022	218.14	.016	258.34		
10	22	072.31		.020	55.71	.022	36.19	.024	57.79	.021	44.38	.022	38.95	.022	205.72		

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	22	.774-UPPER	PHI	.860-UPPER	PHI	.910-UPPER	PHI	.012-LOWER	PHI	.062-LOWER	PHI	.146-LOWER	PHI	.261-LOWER	PHI		
2	22	267.01		1.451	274.82	1.250	277.83	7.607	315.18	4.493	314.45	3.067	312.29	2.128	312.22		
3	22	46.82		.052	48.43	.050	46.15	.472	136.59	.366	78.65	.379	36.97	.386	35.52		
4	22	251.46		.026	233.72	.022	248.11	.038	243.13	.146	330.31	.021	246.06	.020	259.02		
5	22	250.00		.033	335.02	.031	36.21	.041	18.44	.059	17.63	.022	127.85	.017	131.32		
6	22	109.75		.026	111.67	.019	107.22	.036	120.95	.027	117.63	.022	127.85	.017	131.32		
7	22	287.25		.010	305.29	.009	260.44	.026	338.79	.015	329.10	.014	322.22	.005	332.30		
8	22	271.29		.021	270.15	.014	212.55	.008	228.69	.022	241.82	.015	266.31	.034	286.79		
9	22	214.29		.021	206.65	.018	212.55	.008	228.69	.022	241.82	.015	266.31	.034	286.79		
10	22	42.53		.024	49.45	.020	40.06	.008	255.89	.009	50.71	.012	55.73	.015	232.65		

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	22	.530-LOWER	PHI	.661-LOWER	PHI	.774-LOWER	PHI	.860-LOWER	PHI	.910-LOWER	PHI						
2	22	313.43		.915	319.35	.708	328.22	.497	305.51	.447	46.31	.446	42.24	.441	42.24		
3	22	367.01		.416	29.87	.472	30.86	.447	46.31	.446	42.24	.441	42.24	.441	42.24		
4	22	258.35		.024	182.73	.028	266.96	.025	270.12	.025	270.12	.025	270.12	.025	270.12		
5	22	200.63		.036	308.54	.045	187.20	.038	270.12	.038	270.12	.038	270.12	.038	270.12		
6	22	129.13		.011	134.32	.006	108.72	.005	108.72	.005	108.72	.005	108.72	.005	108.72		
7	22	204.90		.004	175.04	.009	222.44	.011	222.44	.011	222.44	.011	222.44	.011	222.44		
8	22	283.23		.035	287.02	.024	286.51	.021	286.51	.021	286.51	.021	286.51	.021	286.51		
9	22	214.73		.024	206.91	.016	218.64	.016	218.64	.016	218.64	.016	218.64	.016	218.64		
10	22	52.49		.015	46.10	.016	44.83	.015	46.10	.015	46.10	.015	46.10	.015	46.10		

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 146 ALPHA-WCL = 6.0 PDP RUN-PT 29.05
RUN 29 ALPHA-PAR = 2.0 O-COMP = .32138
POINT 3 SIGMA = -45. V-REF = 198.79
COMPUTED FREQUENCY = 15.46, K = .1221

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	.012		.062		.148		.261		.392		.530		.661	
	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI
1	22.497	-20.320	7.207	-5.674	4.393	-3.127	2.865	-1.451	1.954	-.155	1.606	-.522	1.026	1.129
2	.076	.582	-.367	.195	.C33	.024	.053	-.027	-.041	-.075	-.041	-.026	-.001	-.122
3	-1.397	-1.050	.154	-.016	.013	-.026	-.036	-.002	-.050	.019	-.021	-.023	-.042	-.051
4	-.040	.143	-.064	-.021	-.014	-.037	-.005	-.003	.031	-.034	-.001	.000	.026	-.002
5	-.255	-.093	-.016	.012	-.016	.005	-.003	-.028	.010	-.029	-.005	-.011	-.001	-.011
6	.084	-.025	-.026	-.055	-.027	.000	.003	-.015	.006	-.022	-.002	-.015	-.001	-.020
7	-.017	-.025	-.018	-.056	-.012	-.030	-.003	-.027	-.002	-.060	.003	-.020	-.009	-.010
8	.051	.089	.018	-.059	.005	.004	.008	-.006	.004	.006	.002	-.002	.012	-.002
9	-.057	-.031	-.005	-.009	-.012	-.004	-.006	-.006	.006	-.004	-.002	-.002	-.005	-.005
10	-.000	-.000	-.000	-.000	-.000	-.000	-.000	-.000	-.000	-.000	-.000	-.000	-.000	-.000

X	.774		.860		.910	
	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI
1	.697	1.251	1.360	1.360	1.360	1.360
2	.067	-.108	.165	-.055	.627	-.859
3	.014	-.019	.015	-.007	.016	-.027
4	-.020	.018	.014	-.000	.008	-.018
5	.012	-.002	.009	-.006	.000	-.001
6	.006	-.016	.009	-.002	.011	-.012
7	-.009	.004	.001	-.000	.010	-.000
8	.006	-.004	.005	-.003	.006	-.002
9	-.000	-.003	-.003	-.003	.003	-.001
10	-.000	-.000	-.000	-.000	-.000	-.000

*** STABILITY PARAMETER

* XI = .7434 *

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	.125		.005		.125		.500		1.125	
	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG
1	.840	-1.376	3.973	1.892	4.415	-9.011	-1.107	-2.274	6.137	1.111
2	.387	.603	.046	.046	.156	-1.150	.399	.064	.064	.064
3	.026	-.029	.027	.027	.187	-.345	-.027	.366	.132	.132
4	.038	-.016	.027	.027	.122	-.263	.000	.132	-.025	-.025
5	.008	.089	.015	.015	.005	.152	.005	.019	.009	.009
6	-.032	.021	.015	.015	.006	.103	.004	.038	.028	.028
7	.056	.027	.008	.008	.006	.042	.004	.015	.030	.030
8	.056	-.032	.008	.008	.006	.042	.004	.015	-.009	-.009
9	.056	-.032	.008	.008	.006	.042	.004	.015	-.035	-.035
10	.056	-.032	.008	.008	.006	.042	.004	.015	-.035	-.035

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 146 ALPHA-MCL = 6.0 PDP RUN-PI 29.05
 RUN 29 ALPHA-RAR = 2.0 Q-COMP = 132138
 POINT 3 SIGMA = -4.5 V-REF = 198.79
 COMPUTED FREQUENCY = 15.46, N = .1221
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	30.308	317.90	9.172	321.79	5.392	324.56	3.212	333.15	1.960	355.46
2	.587	82.56	.415	152.02	.041	35.89	.059	332.91	.085	241.42
3	1.778	216.94	.155	354.08	.029	62.76	.037	176.45	.054	159.23
4	.194	74.36	.067	197.89	.040	249.73	.006	201.50	.046	47.33
5	.364	131.35	.027	108.83	.027	121.51	.035	295.55	.029	275.63
6	.271	339.88	.029	155.52	.017	161.50	.030	287.42	.015	228.96
7	.088	18.79	.026	348.92	.029	19.02	.015	89.85	.023	75.07
8	.150	222.74	.018	147.93	.032	248.22	.027	190.36	.005	65.24
9	.108	55.58	.028	25.37	.005	32.08	.010	37.05	.032	192.66
10	.065	208.79	.010	240.36	.012	197.58	.009	224.48	.007	209.52

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.427	61.23	1.048	81.23	1.062	53.89	2.933	338.75	1.057	315.29
2	.127	302.06	.031	261.08	.020	299.89	.021	219.49	.023	115.81
3	.024	136.83	.016	335.94	.020	114.34	.047	203.86	.024	223.17
4	.027	148.97	.010	358.42	.001	260.71	.005	81.32	.002	174.08
5	.017	290.12	.021	127.46	.013	330.40	.007	118.53	.007	130.59
6	.010	157.43	.014	175.01	.013	284.94	.015	288.43	.002	355.55
7	.007	326.55	.008	36.79	.010	178.78	.010	62.22	.004	13.16
8	.002	269.09	.004	312.22	.009	346.51	.015	259.55	.005	221.49
9	.006	216.27	.004	235.09	.006	338.03	.008	40.46	.003	51.82
10						195.10	.009	212.37	.001	212.85

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	W1	W125	W1	W125	W1	W125
1	1.612	301.42	4.001	353.11	10.034	153.90	1.183	200.92	6.544	110.33
2	.716	57.34	1.914	351.20	1.223	199.91	.472	32.29	1.114	85.67
3	.039	311.51	.403	278.61	.379	155.67	.072	247.73	.366	2.08
4	.042	337.51	.190	283.96	.323	215.39	.030	270.36	.134	349.14
5	.090	84.61	.064	294.71	.195	321.32	.049	31.36	.021	153.18
6	.038	146.73	.002	301.94	.103	2.99	.018	105.01	.029	73.61
7	.062	335.26	.047	289.38	.042	8.34	.019	283.56	.015	237.11
8	.032	294.53	.009	227.55	.082	299.04	.024	286.98	.015	232.51
9	.030	315.65	.012	214.34	.041	252.32	.025	219.80	.018	67.68
10	.032	135.09	.010	243.74	.054	33.16	.022	53.22		

*** STABILITY PARAMETER ***

* XI = .7034 *
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ORIGINAL PAGE IS
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MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 148 ALPHA-MCL = 6.0 PDP RUN-PT 29.07
RUN 29 ALPHA-RAR = 2.0 Q-COMP = .32013
POINT 5 SIGMA = -45. V-REF = 198.40
COMPUTED FREQUENCY = 19.06, K = .1509

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG							
1	16	.952	15.232	-4.546	2.464	-2.921	.819	-2.071	-.189	-1.780	-.905	-1.492	-1.448	-1.120	-1.742
2	1	.474	-.410	-.123	-.193	-.038	-.153	-.021	-.121	-.041	-.127	-.085	-.129	-.041	-.096
3	1	.320	.891	-.014	-.017	.011	-.000	.053	.007	.047	.013	-.039	-.012	-.004	-.010
4	1	.001	-.353	-.015	-.022	.001	-.006	-.020	-.036	-.014	-.051	-.013	-.029	-.024	-.025
5	1	.001	.187	-.028	-.024	-.009	-.005	-.022	.001	-.012	-.040	-.015	-.030	-.010	-.026
6	1	.230	-.127	.028	-.013	-.022	-.015	.021	.005	.036	-.004	.038	-.023	.035	-.018
7	1	.077	-.073	.011	-.007	-.005	.001	.014	.001	.007	.004	.030	-.011	-.001	-.010
8	1	.044	.110	-.012	-.005	-.006	-.004	.002	.012	.006	-.002	.038	-.015	.004	-.010
9	1	.040	-.105	-.003	-.029	-.006	-.005	-.008	-.008	-.012	-.002	-.034	-.001	-.001	-.000
10	1	-.025	.059	-.014	.001	-.010	-.010	-.007	-.007	-.007	-.018	-.034	-.016	-.000	-.003

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG							
1	1	-.864	-1.642	-.617	-1.252	4.363	-5.350	2.271	-3.095	1.822	-2.177	1.822	-2.177	.603	-1.474
2	1	-.015	-.084	.021	-.007	-.023	.014	-.198	-.063	.015	-.012	.015	-.012	.010	-.011
3	1	-.020	-.036	.021	-.035	-.025	.005	.079	-.000	-.051	-.023	-.051	-.023	-.015	-.034
4	1	-.008	-.017	.006	-.025	.027	-.032	.018	.030	.020	-.017	.020	-.017	.001	-.010
5	1	-.034	-.017	.028	-.016	.027	-.031	.024	-.022	.020	-.017	.020	-.017	.024	-.012
6	1	-.000	.010	.002	.009	-.007	.026	.001	.017	.036	.010	.036	.010	.004	-.012
7	1	-.004	-.009	.004	-.011	.014	.018	.003	-.014	.036	.004	.036	.004	.010	-.009
8	1	-.001	-.003	.001	-.001	.003	.022	.000	.014	.039	.011	.039	.011	.010	-.012
9	1	-.001	-.003	-.002	-.002	-.000	-.014	-.006	-.005	-.008	.011	-.008	.011	.006	-.006

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	2	.189	-.009	-.100	-.249	-.479	-.388
2	1	.025	.042	.064	.056	.034	.037
3	4	.007	.000	.024	.028	.005	.006
4	1	.035	-.039	.015	.010	.025	-.043
5	5	.005	.000	.004	.000	-.022	.023
6	7	.014	.024	.020	.016	.023	.014
7	1	.008	.007	.006	.006	.000	.009
8	6	.003	.003	.003	.012	.000	.004
9	1	.003	.007	.001	.002	.006	.016
10	1	.011	.002	.011	.013	.011	.007
	10	.003	.006	.004	.004	.005	.004

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CWT PERIODICITY TEST
CENTIFUGAL BLADE DATA, WALL STATIONS

FILE 146 ALPHA-VCL = 6.0 PGP RUN-PI 29.07
MUM 29 ALPHA-PAR = 2.0 32013
POINT 5 SIGMA = -45.0 168.40
COMPUTEL FREQUENCY = 19.06, K = .1509
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	22	.792	138.06	5.171	151.54	3.033	164.34	2.079	185.21	1.897	206.94	2.079	224.14
2	23	.627	230.97	.229	322.61	.158	250.22	.123	259.95	.133	288.24	.135	303.36
3	24	.593	269.91	.026	350.19	.011	359.67	.054	377.95	.049	384.27	.015	393.39
4	25	.196	287.87	.036	337.02	.010	207.26	.023	276.25	.042	236.14	.031	245.93
5	26	.263	151.06	.031	336.05	.026	325.18	.022	13.40	.038	106.68	.045	116.21
6	27	.108	316.45	.017	326.42	.035	164.66	.014	5.53	.008	28.48	.011	329.04
7	28	.113	161.65	.013	233.76	.003	273.18	.012	284.27	.019	288.14	.017	297.29
8	29	.113	263.58	.016	350.69	.003	273.18	.011	284.27	.012	290.11	.017	297.29
9	30	.064	113.23	.014	175.42	.014	225.33	.010	226.75	.020	249.07	.018	257.21

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	31	.589	232.25	1.608	245.93	1.396	243.67	6.954	309.20	3.824	306.27	2.492	299.37
2	32	.085	230.22	.010	279.56	.001	280.32	.027	31.34	.101	321.46	.197	268.23
3	33	.036	235.78	.041	234.99	.041	238.92	.070	176.01	.178	179.72	.019	321.44
4	34	.029	106.59	.027	110.53	.025	103.19	.035	59.43	.033	59.43	.056	204.54
5	35	.038	333.72	.034	333.90	.033	329.86	.041	310.32	.035	317.52	.026	320.64
6	36	.010	295.59	.005	28.25	.003	102.15	.027	87.13	.014	283.56	.012	321.44
7	37	.010	295.59	.006	278.38	.012	293.70	.023	308.10	.014	283.56	.017	213.74
8	38	.002	125.47	.001	273.64	.004	162.86	.022	97.36	.014	89.60	.014	51.84
9	39	.003	282.80	.004	87.29	.002	227.51	.014	270.03	.008	218.57	.014	126.47

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	40	.937	281.46	.767	269.35	.551	259.58	.420	233.69	.392	216.01	.473	279.70
2	41	.167	300.17	.192	262.70	.219	280.96	.237	263.70	.294	290.88	.119	287.98
3	42	.046	301.73	.024	292.03	.037	130.04	.038	284.43	.036	278.12	.037	123.60
4	43	.029	161.45	.057	226.27	.054	254.37	.048	212.88	.053	241.65	.048	247.25
5	44	.023	321.64	.037	169.16	.033	97.11	.030	389.95	.028	101.42	.027	329.11
6	45	.009	358.28	.028	339.25	.026	321.71	.006	322.65	.008	333.14	.027	329.11
7	46	.010	253.99	.009	358.28	.008	46.72	.006	52.41	.006	89.04	.019	83.56
8	47	.008	93.25	.012	255.57	.013	258.23	.012	259.00	.015	270.87	.016	282.64
9	48	.012	165.06	.007	101.92	.006	AC.74	.006	140.14	.007	145.69	.019	150.06
10	49	.012	165.06	.016	174.23	.011	160.25	.013	178.32	.013	204.96	.014	213.51

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FILE 146 ALPHA-WCL = 6.0 POP RUN.PT 29.07
RUN 29 ALPHA-PAR = 2.0 C-COMP = 32033
POINT 5 SIGMA = -45.0 V-PEF = 198.40
COMPUTED FREQUENCY = 19.06, K = .1509

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012		.062		.148		.261		.392		.530		.661									
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP								
1	21	315	-20	542	4	143	-2	991	2	674	-1	286	1	969	1	443	-	014	1	021	1	199
2	-	114	-	310	4	631	-	047	-	064	-	064	1	017	-	043	-	038	-	021	-	113
3	-	1297	-	318	4	093	-	012	-	043	-	001	1	001	-	018	-	019	-	019	-	038
4	-	070	-	358	4	052	-	017	-	026	-	001	1	000	-	027	-	009	-	009	-	027
5	-	035	-	218	4	021	-	038	-	024	-	017	1	017	-	015	-	006	-	006	-	007
6	-	257	-	158	4	001	-	009	-	003	-	012	1	000	-	006	-	006	-	015	-	002
7	-	084	-	100	4	011	-	009	-	010	-	012	1	002	-	006	-	004	-	006	-	004
8	-	056	-	127	4	006	-	001	-	012	-	003	1	006	-	014	-	007	-	007	-	003
9	-	025	-	073	4	015	-	014	-	014	-	014	1	004	-	012	-	006	-	002	-	006
0	-	025	-	073	4	002	-	021	-	010	-	013	1	004	-	011	-	021	-	011	-	007

X =		774		863		910		N		CNREAL		CNIMAG		N		CMREAL		CMIMAG	
	N	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP											
1	2	.615	1.374	.185	1.107	.625	.779	1	2	.600	.980	1	2	3	4	710	-.734		
2	3	.641	1.146	.010	1.020	.620	-.024	2	3	.045	-.641	2	3	4	5	-.012	-.011		
3	4	.010	-.025	.002	-.026	-.008	.913	3	4	-.043	-.323	3	4	5	6	-.018	-.016		
4	5	-.020	.004	-.002	.013	-.003	-.007	4	5	-.022	.008	4	5	6	7	-.006	-.007		
5	6	.008	.005	.004	.002	.003	-.002	5	6	.013	.015	5	6	7	8	-.005	-.005		
6	7	-.011	-.001	-.002	.001	-.005	.000	6	7	-.000	-.006	6	7	8	9	-.002	-.003		
7	8	.004	.005	.005	.001	.003	-.000	7	8	-.001	-.004	7	8	9	10	-.001	-.002		
8	9	-.037	-.005	-.001	-.008	-.001	-.003	8	9	-.004	-.004	8	9	10	11	-.002	-.003		
9	10	.013	.003	.011	-.009	.010	-.006	9	10	-.006	.007	9	10	11	12	-.001	-.000		
10	11	-.013	.003	-.011	-.009	-.010	-.006	10	11	-.006	-.007	10	11	12	13	-.002	-.000		

*** STABILITY PARAMETER

$$XI = .7339$$

WALL NO.	GAS FRACTION	W1		W2		W4		W6		W10	
		CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	0.89	-1.564	3.14	-1.451	0.636	4.306	-1.933	4.468	-2.859	5.826	
2	0.27	-1.005	1.005	-1.055	0.336	4.838	-0.12	2.232	0.865	0.370	
3	0.16	-0.43	0.43	-1.361	0.22	4.922	-0.26	0.37	0.06	-0.096	
4	0.04	-0.05	0.04	-0.07	0.199	4.29	-0.20	-0.037	-0.043	-0.015	
5	0.04	-0.05	0.04	-0.04	0.26	4.723	-0.38	0.024	0.39	-0.019	
6	0.04	-0.05	0.04	-0.15	0.75	4.016	-0.04	0.014	0.31	-0.038	
7	0.04	-0.05	0.04	-0.02	0.01	4.009	-0.05	0.007	0.06	-0.005	
8	0.04	-0.05	0.04	-0.03	0.10	4.013	-0.08	-0.005	0.02	-0.020	
9	0.04	-0.05	0.04	-0.03	0.21	4.007	-0.08	-0.005	0.02	-0.020	
10	0.04	-0.05	0.04	-0.03	0.21	4.007	-0.08	-0.005	0.02	-0.020	

*** BALL PRESSURES, PER RADIAN ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 148 ALPHA-MCL = 6.0 PDP RUN-PT 29.07
 RUN 29 ALPHA-BAR = 2.0 Q-COMP = 32013
 POINT 3 SIGMA = -45. V-REF = 198.40
 COMPUTED FREQUENCY = 19.06, K = .1509
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	29.632	316.00	8.797	320.81	5.110	324.17	2.967	334.32	1.969	359.60	1.624	24.03
2	331.110	19.07	333.104	76.03	354.305	19.07	367.306	59.60	342.246	46.46	233.60	24.03
3	1.566	214.07	104.334	0.03	612.288	12.45	647.203	27.27	620.178	51.87	2020.331	10.10
4	366.100	98.08	366.166	41.59	404.600	99.99	437.500	27.27	420.325	44.88	205.136	9.36
5	221.990	33.33	245.97	0.00	229.27	0.00	280.84	181.12	117.82	0.00	148.70	148.70
6	302.323	33.33	320.44	112.44	314.229	88.88	315.129	88.88	311.137	71.01	317.82	317.82
7	130.130	34.35	117.329	35.35	606.175	18.18	612.166	95.46	611.137	71.01	161.88	161.88
8	141.103	41.41	82.82	0.00	46.63	0.00	55.46	127.83	101.87	0.00	139.43	139.43
9	134.103	41.41	82.82	0.00	46.63	0.00	55.46	127.83	101.87	0.00	139.43	139.43
10	076.289	12.12	010.323	41.41	021.85	126.26	016.127	83.83	022.101	87.87	023.120	120.37

X	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	1.442	64.73	1.132	80.61	998.51	126.26	998.51	126.26	998.51	126.26	998.51	126.26
2	1.152	285.61	019.10	59.68	031.121	86.86	031.121	86.86	031.121	86.86	031.121	86.86
3	027.292	44.44	013.262	48.48	007.268	25.25	007.268	25.25	007.268	25.25	007.268	25.25
4	020.168	39.39	004.27	28.28	003.328	13.13	003.328	13.13	003.328	13.13	003.328	13.13
5	010.31	89.89	004.156	20.20	006.153	13.13	006.153	13.13	006.153	13.13	006.153	13.13
6	006.185	91.91	001.192	85.85	003.354	20.20	003.354	20.20	003.354	20.20	003.354	20.20
7	006.185	91.91	001.192	85.85	003.354	20.20	003.354	20.20	003.354	20.20	003.354	20.20
8	003.150	38.38	008.139	36.36	005.138	39.39	005.138	39.39	005.138	39.39	005.138	39.39
9	003.150	38.38	008.139	36.36	005.138	39.39	005.138	39.39	005.138	39.39	005.138	39.39
10	014.166	37.37	015.218	30.30	011.213	44.44	011.213	44.44	011.213	44.44	011.213	44.44

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.566	296.74	3.106	351.93	10.556	155.93	1.989	193.62	6.489	116.14	6.489	116.14
2	027.292	44.44	013.262	48.48	007.268	25.25	007.268	25.25	007.268	25.25	007.268	25.25
3	020.168	39.39	004.27	28.28	003.328	13.13	003.328	13.13	003.328	13.13	003.328	13.13
4	010.31	89.89	004.156	20.20	006.153	13.13	006.153	13.13	006.153	13.13	006.153	13.13
5	006.185	91.91	001.192	85.85	003.354	20.20	003.354	20.20	003.354	20.20	003.354	20.20
6	006.185	91.91	001.192	85.85	003.354	20.20	003.354	20.20	003.354	20.20	003.354	20.20
7	003.150	38.38	008.139	36.36	005.138	39.39	005.138	39.39	005.138	39.39	005.138	39.39
8	003.150	38.38	008.139	36.36	005.138	39.39	005.138	39.39	005.138	39.39	005.138	39.39
9	003.150	38.38	008.139	36.36	005.138	39.39	005.138	39.39	005.138	39.39	005.138	39.39
10	014.166	37.37	015.218	30.30	011.213	44.44	011.213	44.44	011.213	44.44	011.213	44.44

*** STABILITY PARAMETER

* XI = .7339 *
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ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILF 138 ALPHA-MCL = 6.0 POP RUN.PT 28.04
RUN 28 ALPHA-RAP = 2.0 O-COMP = 32297
POINT 1 SIGMA = 0. V-REF = 199.30
COMPUTED FREQUENCY = 9.08, K = .0716
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG
1	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
2	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
3	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
4	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
5	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
6	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
7	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
8	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
9	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
10	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	

X	N	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG
1	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
2	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
3	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
4	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
5	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
6	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
7	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
8	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
9	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
10	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	

X	N	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG	UPPER	CPREAL	CPIMAG
1	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
2	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
3	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
4	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
5	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
6	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
7	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
8	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
9	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	
10	18	550	4	321	1	197	1	158	743	507	463	356	214	246	514	221	221	

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 138 ALPHA-MCL = 6.0 PDP RUNPT 28.04
HUN 28 ALPHA-PRAR = 2.0 Q-COMP = .32297
POINT 1 SIGMA = 0. V-REF = 199.30
COMPUTED FREQUENCY = 9.00, K = .0716
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CP-MAG	.012-UPPER PHI	.062-UPPER CP-MAG	.062-UPPER PHI	.148-UPPER CP-MAG	.148-UPPER PHI	.261-UPPER CP-MAG	.261-UPPER PHI	.392-UPPER CP-MAG	.392-UPPER PHI	.530-UPPER CP-MAG	.530-UPPER PHI	.661-UPPER CP-MAG	.661-UPPER PHI
1	19	.047	166.89	.084	162.96	.282	160.99	1.267	156.40	.584	142.42	.326	48.93	.559	23.23
2	19	.285	140.77	.107	140.45	.125	138.15	.059	194.59	.336	188.24	.395	225.84	.381	242.54
3	19	.834	155.99	.368	130.97	.285	108.08	.300	310.63	.364	112.93	.069	112.38	.062	112.78
4	19	.613	148.34	.073	181.92	.053	178.58	.058	146.04	.050	178.12	.049	122.35	.071	212.49
5	19	.110	313.68	.054	287.10	.023	257.58	.077	274.46	.087	230.70	.075	235.23	.044	223.18
6	19	.185	325.68	.001	224.55	.068	234.61	.032	235.15	.036	230.04	.039	238.60	.008	336.86
7	19	.152	261.06	.021	113.52	.023	53.41	.012	153.22	.012	159.22	.014	156.60	.008	156.75
8	19	.085	69.06	.017	113.72	.011	53.39	.011	182.52	.008	159.38	.007	154.21	.008	156.16
9	19	.173	247.10	.010	220.15	.031	220.82	.033	133.35	.023	99.33	.022	93.18	.020	196.00
10	19	.161	119.41	.034	102.06	.031	104.47	.033	133.35	.023	99.33	.022	93.18	.020	196.00

X	N	.774-UPPER CP-MAG	.774-UPPER PHI	.860-UPPER CP-MAG	.860-UPPER PHI	.910-UPPER CP-MAG	.910-UPPER PHI	.012-LOWER CP-MAG	.012-LOWER PHI	.062-LOWER CP-MAG	.062-LOWER PHI	.148-LOWER CP-MAG	.148-LOWER PHI	.261-LOWER CP-MAG	.261-LOWER PHI
1	19	.837	13.51	.889	14.23	.862	15.97	.496	350.08	.204	264.94	.157	258.59	.135	11.14
2	19	.137	250.22	.154	252.19	.154	253.22	.336	308.85	.319	314.65	.347	310.62	.352	311.95
3	19	.368	182.64	.373	183.85	.369	179.14	.054	190.14	.039	178.33	.055	180.02	.051	185.16
4	19	.055	250.90	.062	260.95	.061	263.44	.058	237.20	.042	242.75	.045	250.70	.041	254.74
5	19	.066	250.79	.057	230.14	.067	227.09	.048	214.58	.042	219.41	.040	228.72	.040	233.34
6	19	.049	335.47	.049	329.93	.049	329.93	.019	199.57	.019	199.57	.015	186.41	.012	172.63
7	19	.017	152.07	.018	146.37	.018	146.37	.017	70.85	.006	70.85	.014	181.69	.009	192.67
8	19	.009	142.63	.008	147.10	.007	129.62	.013	358.13	.006	70.85	.008	81.69	.009	192.67
9	19	.017	99.72	.017	96.59	.013	196.62	.013	358.13	.006	70.85	.008	81.69	.009	192.67
10	19	.017	99.72	.017	96.59	.013	196.62	.013	358.13	.006	70.85	.008	81.69	.009	192.67

X	N	.392-LOWER CP-MAG	.392-LOWER PHI	.530-LOWER CP-MAG	.530-LOWER PHI	.661-LOWER CP-MAG	.661-LOWER PHI	.774-LOWER CP-MAG	.774-LOWER PHI	.860-LOWER CP-MAG	.860-LOWER PHI	.910-LOWER CP-MAG	.910-LOWER PHI
1	19	.948	19.69	1.042	16.66	.965	26.25	.782	38.70	.961	29.51	.723	22.28
2	19	.135	253.09	.167	252.35	.142	251.77	.136	267.09	.159	251.14	.131	508.28
3	19	.051	312.32	.040	312.48	.057	312.71	.070	312.83	.061	311.89	.055	508.28
4	19	.064	226.14	.060	225.92	.065	220.60	.063	184.31	.055	182.60	.063	311.90
5	19	.031	226.05	.077	228.44	.040	230.68	.072	227.06	.071	227.94	.064	311.90
6	19	.011	125.87	.015	133.02	.014	133.02	.057	227.06	.050	225.94	.044	311.90
7	19	.006	125.87	.015	133.02	.014	133.02	.018	134.71	.015	130.33	.010	127.66
8	19	.011	125.87	.015	133.02	.014	133.02	.018	134.71	.015	130.33	.010	127.66
9	19	.006	125.87	.015	133.02	.014	133.02	.018	134.71	.015	130.33	.010	127.66
10	19	.011	125.87	.015	133.02	.014	133.02	.018	134.71	.015	130.33	.010	127.66

ORIGINAL PAGE IS
OF POOR QUALITY

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RZF      ALPHA-XCL = 5.00      RFE RMV.M = 28.04
RPM      ALPHA-BAB = 2.00      RFE C-004 = 32297
RCH      ALPHA-SIGMA = 9.00    RFE V-004 = 199.35
      CROUTED FREQUENCY = 9.00, K = .0716

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** FLARE PRESSURES, ACOUSTIC FORCE, AND
MOMENT, PER PROTON ***

[illegible]

X =	.774		.920		.910		N	CMREAL		CMIMAG		N	CMREAL		CMIMAG	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP		CMREAL	CMIMAG	CMREAL	CMIMAG		CMREAL	CMIMAG		
1	-.2939	.2947	-.2637	.197	-.369	.319	1	2	.112	-.228	.794	1	.794	-.171	-.171	
2	-.2939	.2947	-.2637	-.197	-.369	.319	2	2	.112	-.228	.794	2	.794	-.171	-.171	
3	-.2939	.2947	-.2637	-.197	-.369	.319	3	2	.112	-.228	.794	3	.794	-.171	-.171	
4	-.2939	.2947	-.2637	-.197	-.369	.319	4	2	.112	-.228	.794	4	.794	-.171	-.171	
5	-.2939	.2947	-.2637	-.197	-.369	.319	5	2	.112	-.228	.794	5	.794	-.171	-.171	
6	-.2939	.2947	-.2637	-.197	-.369	.319	6	2	.112	-.228	.794	6	.794	-.171	-.171	
7	-.2939	.2947	-.2637	-.197	-.369	.319	7	2	.112	-.228	.794	7	.794	-.171	-.171	
8	-.2939	.2947	-.2637	-.197	-.369	.319	8	2	.112	-.228	.794	8	.794	-.171	-.171	
9	-.2939	.2947	-.2637	-.197	-.369	.319	9	2	.112	-.228	.794	9	.794	-.171	-.171	
10	-.2939	.2947	-.2637	-.197	-.369	.319	10	2	.112	-.228	.794	10	.794	-.171	-.171	

*** STABILITY PARAMETER ***

*** WALL PPESSURES, PEP RABIAN ***

[illegible]

MODE 1 -- GCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 138 ALPHA-WCL = 6.0 PDP KUR.PT 28.34
MUN 128 ALPHA-BAR = 2.0 Q-COMP = .32297
POINT 1 SIGMA = 0. V-REF = 199.30
COMPUTED FREQUENCY = 9.08, N = .0716

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, PER RADIAN ***

X =	.012		.062		.148		.261		.392		.530		.661	
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	.007	347.55	6.452	349.68	4.033	350.54	2.474	354.18	1.356	358.45	7.751	17.23	.308	31.73
2	.052	282.53	.056	334.34	.124	310.36	.052	278.99	.139	268.26	.114	268.91	.048	270.93
3	1.139	223.53	.034	132.52	.063	322.36	.032	319.58	.034	140.26	.011	268.34	.025	149.01
4	.156	223.53	.034	179.73	.026	324.34	.026	219.58	.015	231.08	.004	239.38	.005	125.36
5	.114	223.53	.034	179.73	.026	244.53	.026	158.33	.029	261.04	.009	154.94	.007	135.85
6	.127	184.51	.040	39.67	.010	223.40	.016	321.30	.009	261.04	.013	117.17	.004	168.67
7	.136	164.50	.038	269.02	.026	199.61	.009	253.83	.005	231.53	.004	72.91	.006	40.58
8	.112	233.58	.024	277.54	.025	171.74	.014	63.33	.005	286.12	.008	279.53	.007	52.55
9	.198	303.28	.029	208.38	.024	291.66	.024	287.57	.013	261.04	.011	279.53	.014	275.81
10	.168	303.28												

X =	.774	.860	.910	
N	DELCPM	PHI	DELCPM	
1	.357	124.64	.435	136.96
2	.040	349.58	.026	136.96
3	.019	295.77	.014	141.32
4	.015	190.44	.037	185.58
5	.007	269.87	.002	245.14
6	.010	170.36	.005	245.14
7	.008	325.21	.006	103.67
8	.004	60.69	.009	353.46
9	.009	340.75	.004	301.33
10	.005	290.75	.002	87.37

N	CM-MAG	PHIM
1	.837	347.86
2	.020	3284.52
3	.010	3331.08
4	.002	1149.08
5	.002	1432.70
6	.004	2235.71
7	.005	257.61
8	.005	290.61
9	.005	290.61
10	.005	290.61

N	CM-MAG	PHIN
1	2.124	32.85
2	.037	3282.50
3	.023	325.14
4	.002	186.00
5	.002	118.72
6	.002	325.60
7	.025	233.58
8	.018	62.61
9	.018	62.61
10	.018	62.61

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2
GAP FRACTION	CP-MAG	PHI
1	.439	61.09
2	.049	308.45
3	.065	183.27
4	.052	268.04
5	.100	236.27
6	.045	319.27
7	.021	180.35
8	.017	110.80
9	.022	199.78
10		

*** STABILITY PARAMETER ***
* XI = .1708 *
* *****

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 --- OCWT PERIODICITY TEST
CENTEP BLADE DATA, WALL STATIONS

FILE 140 ALPHA-MCL = 6.0 PDP RUN.PT 28.06
RUN 28 ALPHA-RAR = 2.0 Q-COMP = .32435
POINT 3 SIGMA = 0. V-REF = 199.73
COMPUTED FREQUENCY = 15.44, K = .1214

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	.062-UPPER	.148-UPPER	.261-UPPER	.392-UPPER	.530-UPPER	.661-UPPER
1	17	.888	2.677	-3.944	.630	-1.454	-.076	-.246	.023
2	3	.095	.342	-.012	.266	.018	.041	.037	.040
3	3	.959	.268	-.012	.000	-.035	.006	.037	.013
4	5	.370	.400	.009	-.007	.053	.030	.034	.011
5	5	.004	.003	.011	.004	.006	.002	.001	.001
6	7	.210	.065	.021	.009	.006	.017	.010	.007
7	7	.023	.135	-.021	-.006	.015	.023	.015	.007
8	9	.039	.128	.001	.014	-.002	.019	.002	.002
9	9	.011	.061	.007	.004	.003	.002	.002	.002
10	10	.012	.007	.007	.004	.003	.003	.001	.000

X	N	CPREAL	CPIMAG	.860-UPPER	.910-UPPER	.012-LOWER	.062-LOWER	.148-LOWER	.261-LOWER
1	17	.888	2.677	-3.944	.630	-1.454	-.076	-.246	.023
2	3	.095	.342	-.012	.266	.018	.041	.037	.040
3	3	.959	.268	-.012	.000	-.035	.006	.037	.013
4	5	.370	.400	.009	-.007	.053	.030	.034	.011
5	5	.004	.003	.011	.004	.006	.002	.001	.001
6	7	.210	.065	.021	.009	.006	.017	.010	.007
7	7	.023	.135	-.021	-.006	.015	.023	.015	.007
8	9	.039	.128	.001	.014	-.002	.019	.002	.002
9	9	.011	.061	.007	.004	.003	.002	.002	.002
10	10	.012	.007	.007	.004	.003	.003	.001	.000

X	N	CPREAL	CPIMAG	.530-LOWER	.661-LOWER	.774-LOWER	.860-LOWER	.910-LOWER
1	17	.888	2.677	-3.944	.630	-1.454	-.076	-.246
2	3	.095	.342	-.012	.266	.018	.041	.037
3	3	.959	.268	-.012	.000	-.035	.006	.037
4	5	.370	.400	.009	-.007	.053	.030	.034
5	5	.004	.003	.011	.004	.006	.002	.001
6	7	.210	.065	.021	.009	.006	.017	.010
7	7	.023	.135	-.021	-.006	.015	.023	.015
8	9	.039	.128	.001	.014	-.002	.019	.002
9	9	.011	.061	.007	.004	.003	.002	.002
10	10	.012	.007	.007	.004	.003	.003	.001

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 140 ALPHA-VCL = 6.0 PDP RUN.PT 28.06
HUN 28 ALPHA-PAR = 2.0 Q-COMP = 32435
POINT 3 SIGMA = 0. V-PEF = 199.73
COMPUTED FREQUENCY = 15.44, K = .1214

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	18	.087	171.49	.062	173.92	1.456	177.19	.677	181.70	.252	192.04	.024	14.32	.530	UPPER
2	355	135.45	.054	180.00	.036	186.33	.026	179.58	.197	178.47	.020	151.74	.661	UPPER	PHI
3	995	164.41	.023	293.90	.053	184.33	.028	256.81	.020	246.95	.036	231.02	.024	14.32	CP-MAG
4	598	51.80	.035	271.40	.054	94.74	.024	75.55	.035	87.90	.035	388.79	.030	388.79	CP-MAG
5	.023	280.80	.022	339.99	.023	14.90	.019	19.97	.018	24.79	.012	33.55	.009	42.47	PHI
6	.226	21.99	.031	185.11	.023	196.08	.018	213.80	.025	205.77	.015	171.37	.011	171.37	CP-MAG
7	.137	263.29	.014	85.86	.012	113.70	.002	345.55	.020	21.87	.038	108.59	.004	115.41	PHI
8	.062	36.13	.006	278.26	.007	62.59	.008	67.33	.008	82.42	.009	88.00	.009	88.00	CP-MAG
9	.014	329.92	.007	24.14	.007	62.59	.008	67.33	.008	82.42	.009	88.00	.009	88.00	PHI
10															CP-MAG

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	300	12.44	.341	22.51	.309	36.65	4.194	350.29	1.907	5.48	1.272	8.43	.675	22.67	UPPER
2	.116	68.54	.108	217.29	.122	207.07	.013	97.49	.089	31.04	.113	55.23	.115	22.67	CP-MAG
3	.042	217.46	.041	355.66	.050	336.28	.019	25.82	.021	132.04	.042	215.97	.039	355.66	PHI
4	.026	89.99	.021	88.74	.021	84.91	.023	148.09	.025	51.77	.031	57.01	.030	71.02	CP-MAG
5	.009	56.51	.010	147.41	.017	145.92	.011	49.20	.010	123.54	.036	166.66	.000	345.44	PHI
6	.001	169.03	.004	305.44	.015	257.47	.010	292.24	.009	73.36	.017	142.71	.025	349.99	CP-MAG
7	.002	53.12	.003	81.45	.010	104.32	.009	153.47	.008	139.95	.026	137.61	.003	81.45	PHI
8	.010	92.70	.010	114.94	.009	104.32	.009	153.47	.008	139.95	.006	151.33	.006	139.95	CP-MAG
9															PHI
10															CP-MAG

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	.596	51.45	.551	71.94	.630	94.14	.429	104.37	.602	93.33	.602	93.33	.602	93.33	UPPER
2	.111	64.73	.119	63.74	.149	57.47	.110	73.08	.121	65.03	.121	65.03	.121	65.03	CP-MAG
3	.036	355.38	.034	229.32	.036	223.15	.027	229.55	.041	221.72	.041	221.72	.041	221.72	PHI
4	.027	64.74	.032	64.97	.047	10.08	.042	16.55	.033	21.41	.033	21.41	.033	21.41	CP-MAG
5	.022	342.45	.009	339.18	.007	61.03	.032	76.91	.027	80.40	.027	80.40	.027	80.40	PHI
6	.019	161.34	.009	152.07	.026	351.18	.019	169.43	.015	171.06	.015	171.06	.015	171.06	CP-MAG
7	.016	345.31	.016	340.17	.018	165.18	.010	163.98	.014	145.15	.014	145.15	.014	145.15	PHI
8	.002	132.45	.003	203.74	.002	257.18	.008	259.68	.001	145.15	.001	145.15	.001	145.15	CP-MAG
9	.003	130.42	.006	110.26	.009	108.85	.008	83.62	.009	110.26	.009	110.26	.009	110.26	PHI
10															CP-MAG

9CWT PERIODICITY TEST

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FILE 14C  ALPHA-PCL = 6.0  PDP RUN.PI 28.06
RUN 28  ALPHA-PAD = 2.0  Q-COMP = .32435
POINT 3  SIGMA = 0.  V-PEF = 199.73
REAL & IMAGINARY  COMPUTED FREQUENCY = 15.44, K = .1214

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND
COMPUTED

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012		.062		.148		.261		.392		.530		.661	
	N	DELCPR	N	DELCPR	N	DELCPR	N	DELCPR	N	DELCPR	N	DELCPR	N	DELCPR
1	21	.943	-	.448	3	.597	-	.186	1	.248	-	.492	-	.518
2	1	.257	-	.179	2	.088	-	.035	-	.004	-	.122	-	.013
3	1	.255	-	.169	2	.085	-	.020	-	.007	-	.008	-	.009
4	1	.490	-	.044	2	.043	-	.014	-	.006	-	.013	-	.011
5	1	.320	-	.044	2	.028	-	.004	-	.010	-	.007	-	.009
6	1	.372	-	.016	2	.039	-	.017	-	.014	-	.008	-	.005
7	1	.144	-	.016	2	.008	-	.005	-	.005	-	.007	-	.006
8	1	.073	-	.026	2	.027	-	.030	-	.023	-	.016	-	.009
9	1	.043	-	.012	2	.007	-	.002	-	.003	-	.004	-	.004
10	1	.011	-	.002	2	.007	-	.008	-	.007	-	.004	-	.003

X	.774		.860		.910		N	CNREAL	CNIMAG	N	CMREAL	CMIMAG
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP						
1	.338	.564	.426	.283	.286	.477	1	1.887	.238	1	.739	-.103
2	.007	.010	.005	.004	.010	.017	2	.020	-.068	2	.006	-.001
3	.002	.018	.000	.000	.011	.006	3	.030	-.010	3	.017	-.001
4	.013	.002	.007	.015	.003	.006	4	.007	.009	4	.003	-.001
5	.003	.001	.004	.010	.006	.005	5	.010	-.008	5	.007	-.000
6	.019	.003	.006	.004	.001	.007	6	.016	-.008	6	.007	-.000
7	.002	.004	.008	.004	.007	.000	7	.015	.013	7	.002	-.003
8	.002	.004	.008	.004	.007	.000	8	.002	-.015	8	.001	-.002
9	.002	.001	.005	.002	.001	.001	9	.002	-.005	9	.001	-.000
10	.002	.001	.005	.002	.001	.001	10	.005	-.001	10	.001	-.000

*** STABILITY PARAMETER

$$XI = .1031$$

*** WALL PRESSURES, PER RADIAN ***

WALL NO. 11 W2
GAP FRACTION - .125 .DOR
CPREAL CPIMAG CPREAL CPIM

XI = .1031

OCWI PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 14C ALPHA-WCL = 6.0 PDP RUN-PT 28.06
 RUN 28 ALPHA-RAR = 2.0 O-COMP = .32435
 POINT 3 SIGMA = 0. V-REF = 199.73
 COMPUTED FREQUENCY = 15.44, K = .1214

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NGRAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPH	DELCPH	PHI	DELCPH	DELCPH	PHI	DELCPH	DELCPH	PHI	DELCPH	DELCPH	PHI
		.012	.062	.149	.261	.392	.530	.661					
1	22	.231	.351	.26	5.860	355.61	3.597	358.77	2.207	291.41	1.341	21.51	.870
2	.551	.283	.00	.189	.209	.326	.073	338.54	.095	326.63	.016	273.11	.061
3	.990	.345	.09	.069	.91.56	.048	.345	.26	.024	207.56	.013	148.62	.020
4	.538	.236	.53	.015	.205	.54	.013	348.11	.006	207.56	.013	50.80	.013
5	.033	.08	.35	.032	.150	.19	.039	307.91	.018	200.41	.017	319.80	.007
6	.241	.197	.50	.028	.150	.19	.019	190.86	.014	110.60	.018	209.76	.014
7	.147	.173	.02	.028	.274	.79	.036	330.81	.034	331.25	.012	72.70	.037
8	.060	.273	.63	.013	.03.70	.017	.012	121.77	.034	132.07	.007	255.40	.019
9	.072	.77	.57	.017	.170	.10	.007	188.49	.008	195.93	.004	132.07	.004
10	.023	.151	.26										.004

X	N	DELCPH	DELCPH	PHI	DELCPH	DELCPH	PHI	DELCPH	DELCPH	PHI	DELCPH	DELCPH	PHI
		.774	.860	.910									
1	658	.120	.97	.507	.146	.04	.556	126.96	1.902	7.19	.074	292.45	.746
2	.042	.230	.06	.008	.145	.62	.019	80.49	.031	341.31	.010	232.08	.020
3	.012	.234	.09	.016	.321	.81	.012	150.97	.010	205.36	.018	293.49	.017
4	.013	.350	.18	.011	.49	.69	.007	328.20	.012	319.53	.053	113.00	.009
5	.003	.280	.96	.011	.291	.65	.007	328.20	.012	319.53	.053	113.00	.007
6	.017	.177	.30	.007	.217	.14	.017	320.77	.012	319.53	.053	113.00	.004
7	.019	.352	.58	.009	.226	.43	.001	320.77	.012	319.53	.053	113.00	.003
8	.004	.245	.62	.005	.343	.18	.001	223.28	.012	319.53	.053	113.00	.002
9	.003	.206	.92						.012	319.53	.053	113.00	.001
10									.012	319.53	.053	113.00	.001

*** WALL PRESSURES, PER RADIAN ***

GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
		.125	.125	.125	.125	.500	.500	.125	.125	.125	.125	.125	.125
1	397	.157	.66	.2	.023	.358	.63	8.857	175.72	1.114	179.57	5.536	182.14
2	.265	.74	.03	.787	.285	.64	.040	.593	253.69	.235	175.58	.064	215.67
3	.044	.237	.68	.155	.220	.44	.051	.659	182.84	.040	175.58	.035	215.67
4	.056	.346	.39	.155	.220	.44	.051	.659	182.84	.040	175.58	.035	215.67
5	.043	.722	.19	.007	.155	.95	.041	.659	182.84	.040	175.58	.035	215.67
6	.006	.322	.19	.007	.155	.95	.041	.659	182.84	.040	175.58	.035	215.67
7	.023	.174	.14	.044	.168	.15	.013	.659	182.84	.040	175.58	.035	215.67
8	.009	.38.33		.003	.32.59		.022	.659	182.84	.040	175.58	.035	215.67
9	.007	.53.41		.018	.17.43		.004	.659	182.84	.040	175.58	.035	215.67
10	.008	.132.61		.015	.144.70		.007	.659	182.84	.040	175.58	.035	215.67

*** STABILITY PARAMETER

* XI = .1031 *
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ORIGINAL PAGE IS
 OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 142 ALPHA-VCL = 6.0 PDP RUN-PT 28.08
RUN 26 ALPHA-PAR = 2.0 C-COMP = 32292
POINT 5 SIGMA = 0.0 V-REF = 199.28
COMPUTED FREQUENCY = 19.04, K = .1501

FOUPIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	17	664	2	531	3	432	4	09	1	787	057	856	137
2	116	326	1	016	2	27	040	227	040	059	081	031	136
3	971	513	017	028	017	029	040	027	040	071	071	042	076
4	340	382	003	007	014	009	009	007	009	027	004	009	006
5	041	001	007	007	014	009	009	007	009	004	006	003	007
6	166	001	007	007	014	009	009	007	009	004	006	003	007
7	079	003	007	007	014	009	009	007	009	004	006	003	007
8	005	003	007	007	014	009	009	007	009	004	006	003	007
9	028	003	007	007	014	009	009	007	009	004	006	003	007
10	012	003	007	007	014	009	009	007	009	004	006	003	007
X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	015	000	001	000	001	000	001	000	001	000	001	000
2	026	001	000	001	000	001	000	001	000	001	000	001	000
3	011	001	000	001	000	001	000	001	000	001	000	001	000
4	003	001	000	001	000	001	000	001	000	001	000	001	000
5	007	001	000	001	000	001	000	001	000	001	000	001	000
6	002	001	000	001	000	001	000	001	000	001	000	001	000
7	002	001	000	001	000	001	000	001	000	001	000	001	000
8	002	001	000	001	000	001	000	001	000	001	000	001	000
9	000	001	000	001	000	001	000	001	000	001	000	001	000
10	004	001	000	001	000	001	000	001	000	001	000	001	000
X	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	015	000	001	000	001	000	001	000	001	000	001	000
2	026	001	000	001	000	001	000	001	000	001	000	001	000
3	011	001	000	001	000	001	000	001	000	001	000	001	000
4	003	001	000	001	000	001	000	001	000	001	000	001	000
5	007	001	000	001	000	001	000	001	000	001	000	001	000
6	002	001	000	001	000	001	000	001	000	001	000	001	000
7	002	001	000	001	000	001	000	001	000	001	000	001	000
8	002	001	000	001	000	001	000	001	000	001	000	001	000
9	000	001	000	001	000	001	000	001	000	001	000	001	000
10	004	001	000	001	000	001	000	001	000	001	000	001	000

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 142 ALPHA-MCL = 6.0 POP RUN-PI 28.08
KUN 28 ALPHA-PAR = 2.0 Q-COMP = 32292
POINT 28 ALPHA-SIGMA = 0.0 V-REF = 199.26
COMPUTED FREQUENCY = 19.04, K = .1501

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	17	.840	171.94	3.462	173.22	1.788	178.18	.867	189.11	.320	223.73	.737	352.06
2	34	.340	109.65	.227	74.15	.093	116.05	.140	102.76	.161	102.21	.062	90.82
3	51	.098	152.17	.047	72.09	.018	129.58	.087	132.18	.033	106.85	.052	112.89
4	68	.512	103.78	.040	226.12	.028	162.40	.011	33.44	.007	258.10	.012	204.28
5	85	.063	103.78	.010	108.59	.028	123.52	.008	246.22	.007	273.84	.006	211.41
6	102	.166	339.55	.015	267.47	.015	23.12	.003	6.58	.011	242.65	.007	94.63
7	119	.034	261.54	.015	62.87	.015	45.21	.004	23.67	.020	34.41	.014	11.41
8	136	.034	297.75	.009	301.26	.009	338.92	.004	54.52	.009	20.49	.003	68.43
9	153	.031	247.59	.003	302.20	.003	291.87	.003	342.38	.003	286.30	.005	89.98
10	170	.031	247.59	.011	2.51	.012	16.27	.014	37.83	.020	16.70	.016	52.04

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.015	359.92	1.008	67.24	.987	9.76	.897	351.48	2.711	3.74	1.502	17.40
2	3	.019	89.16	.008	67.24	.009	25.69	.040	270.17	.089	307.92	.045	128.30
3	5	.054	119.52	.033	116.11	.052	114.04	.050	154.20	.054	110.56	.035	128.30
4	7	.007	232.87	.003	209.51	.013	205.99	.029	159.10	.022	198.60	.023	217.41
5	9	.007	102.38	.003	107.30	.007	142.22	.022	296.95	.008	293.09	.006	232.06
6	11	.016	6.23	.005	147.13	.007	100.13	.028	149.11	.017	166.28	.019	229.06
7	13	.004	145.26	.005	191.03	.018	169.66	.016	338.37	.010	156.85	.029	199.33
8	15	.008	91.84	.005	178.54	.003	82.92	.015	162.48	.011	172.35	.017	199.33
9	17	.017	76.01	.021	96.29	.016	86.07	.026	112.76	.023	119.83	.026	199.33
10	19												

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.132	29.16	1.054	38.50	1.054	39.17	1.025	51.52	.739	46.30	1.037	45.33
2	3	.043	39.47	.050	42.83	.050	38.67	.071	51.52	.046	88.30	.039	35.77
3	5	.022	117.37	.027	123.89	.027	134.18	.047	114.98	.040	116.38	.038	126.58
4	7	.005	220.51	.003	231.69	.003	235.33	.022	234.93	.015	258.05	.016	235.38
5	9	.014	220.51	.010	238.06	.010	208.98	.006	99.86	.004	255.91	.005	255.38
6	11	.021	225.54	.022	238.70	.022	246.98	.015	237.94	.019	255.96	.024	255.38
7	13	.009	215.78	.011	226.09	.007	221.09	.025	243.44	.006	277.73	.023	273.35
8	15	.007	191.17	.008	112.10	.007	120.31	.005	123.04	.004	152.96	.004	154.03
9	17	.012	131.57	.012	133.27	.007	135.59	.007	102.44				
10	19												

*** ALL PRESSURES PER RADIAN ***

OCMI PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 142 ALPHA-WCL = 6.0 PDP RUN-PT 28.08
 RUN 28 ALPHA-RAR = 2.0 Q-COMP = 32292
 POINT 5 SIGMA = U. V-REF = 199.28
 CG-COMPUTED FREQUENCY = 19.04, K = .1501
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	22.737	351.84	6.148	357.84	3.775	2.40	2.362	14.37	1.443	32.36	1.154	60.65	.773	83.49
2	.676	283.09	.305	283.48	.115	316.15	.134	299.81	.138	287.10	.041	304.87	.050	322.52
3	1.048	332.02	.034	162.03	.057	310.52	.053	293.09	.019	266.33	.017	240.39	.022	325.83
4	.523	225.37	.027	73.20	.009	194.01	.034	216.78	.012	214.97	.015	251.42	.011	258.51
5	.084	267.16	.013	230.67	.033	319.57	.014	86.73	.006	172.89	.030	244.21	.008	258.98
6	.189	179.32	.023	132.89	.036	208.41	.021	226.58	.003	303.39	.017	38.62	.010	51.15
7	.065	160.34	.018	345.70	.014	342.30	.018	32.32	.018	208.36	.019	221.12	.009	229.48
8	.042	197.91	.016	143.31	.025	174.19	.020	205.22	.010	102.88	.017	119.76	.004	162.39
9	.071	103.83	.017	61.77	.039	153.27	.015	114.51	.027	172.62	.024	179.76	.017	206.64
10	.052	83.20	.030	138.63	.039	153.27	.035	176.16	.027	172.62	.024	179.76	.017	206.64

N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	.898	115.11	.685	142.23	.676	117.96	.676	117.96	1.995	13.57	1.151	300.57	.777	353.09
2	.054	324.42	.017	255.33	.017	264.96	.017	264.96	.047	312.06	.047	312.06	.017	329.15
3	.008	262.18	.012	199.97	.008	288.28	.008	288.28	.026	228.93	.026	228.93	.008	314.26
4	.010	78.18	.004	170.71	.004	170.71	.004	170.71	.007	217.07	.007	217.07	.003	302.17
5	.021	251.95	.012	240.11	.011	270.71	.011	270.71	.019	217.07	.019	217.07	.005	166.84
6	.011	51.55	.001	171.94	.007	66.09	.007	66.09	.007	34.29	.007	34.29	.001	261.00
7	.009	269.11	.010	347.75	.007	299.90	.010	299.90	.010	203.24	.010	203.24	.003	148.00
8	.005	238.73	.008	226.58	.007	224.61	.007	224.61	.008	114.31	.008	114.31	.003	190.59
9	.011	238.41	.019	293.94	.013	290.81	.013	290.81	.018	174.58	.018	174.58	.004	133.10
10														

*** STABILITY PARAMETER

* XI = .0935 *

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	.465	4.38	3.426	358.04	8.206	177.23	.417	404.85	5.207	144.44	.095	227.39	.095	227.39
2	.164	84.80	.318	281.34	.677	256.38	.163	90.48	.370	174.17	.370	174.17	.370	174.17
3	.059	117.12	.103	156.36	.619	170.04	.025	201.95	.049	137.56	.049	137.56	.049	137.56
4	.009	160.81	.063	153.18	.324	266.88	.007	132.49	.085	168.28	.085	168.28	.085	168.28
5	.009	159.90	.011	175.90	.038	53.09	.005	142.53	.015	67.93	.015	67.93	.015	67.93
6	.015	205.39	.031	175.90	.032	33.97	.019	32.00	.021	112.47	.021	112.47	.021	112.47
7	.020	125.96	.031	175.90	.031	74.55	.005	70.11	.017	3.48	.017	3.48	.017	3.48
8	.009	139.41	.006	351.58	.023	90.08	.002	1.44	.010	81.76	.010	81.76	.010	81.76
9	.009	54.06	.035	81.77	.021	212.65	.015	71.39	.021	81.76	.021	81.76	.021	81.76
10	.018	108.01	.035	81.77	.021	212.65	.015	71.39	.021	81.76	.021	81.76	.021	81.76

*** WALL PRESSURES, PER RADIAN ***

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILF 150 ALPHA-MCL = 6.0 PDP RUN.PI 30.01
RUM 30 ALPHA-RAP = 2.0 Q-COMP = .32578
POINT 1 SIGMA = 45. V-PEF = .280.16
COMPUTED FREQUENCY = 9.05, K = .0710

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	22	.825	-8.51C	-5.561	-1.627	-3.283	-766	-2.000	-218	-1.357	318	-.867	869
2	23	.051	-1.173	-.296	.023	-.125	.023	-.119	.010	-.150	.053	-.157	.123
3	24	.836	-1.959	.065	.013	.072	.015	.051	-.009	-.067	-.002	-.091	.042
4	25	.241	-.302	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
5	26	.166	-.308	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
6	27	.400	-.305	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
7	28	.068	-.390	.036	.033	.056	.033	.037	.052	.032	.025	.038	.038
8	29	.137	-.320	.049	.041	.051	.040	.050	.039	.032	.025	.038	.038
9	30	.143	-.045	.002	.008	.003	.009	.016	.020	.004	.014	.032	.017
10	31	.057	-.012	.011	-.025	.015	-.025	.010	-.008	.009	-.008	.008	-.011

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	22	.825	-8.51C	-5.561	-1.627	-3.283	-766	-2.000	-218	-1.357	318	-.867	869
2	23	.051	-1.173	-.296	.023	-.125	.023	-.119	.010	-.150	.053	-.157	.123
3	24	.836	-1.959	.065	.013	.072	.015	.051	-.009	-.067	-.002	-.091	.042
4	25	.241	-.302	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
5	26	.166	-.308	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
6	27	.400	-.305	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
7	28	.068	-.390	.036	.033	.056	.033	.037	.052	.032	.025	.038	.038
8	29	.137	-.320	.049	.041	.051	.040	.050	.039	.032	.025	.038	.038
9	30	.143	-.045	.002	.008	.003	.009	.016	.020	.004	.014	.032	.017
10	31	.057	-.012	.011	-.025	.015	-.025	.010	-.008	.009	-.008	.008	-.011

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	22	.825	-8.51C	-5.561	-1.627	-3.283	-766	-2.000	-218	-1.357	318	-.867	869
2	23	.051	-1.173	-.296	.023	-.125	.023	-.119	.010	-.150	.053	-.157	.123
3	24	.836	-1.959	.065	.013	.072	.015	.051	-.009	-.067	-.002	-.091	.042
4	25	.241	-.302	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
5	26	.166	-.308	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
6	27	.400	-.305	.041	-.087	.059	.042	.049	.084	.052	.134	.048	.020
7	28	.068	-.390	.036	.033	.056	.033	.037	.052	.032	.025	.038	.038
8	29	.137	-.320	.049	.041	.051	.040	.050	.039	.032	.025	.038	.038
9	30	.143	-.045	.002	.008	.003	.009	.016	.020	.004	.014	.032	.017
10	31	.057	-.012	.011	-.025	.015	-.025	.010	-.008	.009	-.008	.008	-.011

ORIGINAL PAGE IS
OF POOR QUALITYMODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 150 ALPHA-WCL = 5.0 POP RUN.PI 30.01
 RUN 30 ALPHA-PAP = 2.0 Q-COMP = 32578
 POINT 1 SIGMA = 45. V-REF = 203.16
 COMPUTED FREQUENCY = 9.05, K = .0710

FOURIER COEFFICIENTS, REAL & IMAGINARY

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X = .022		.062		.148		.261		.392		.530		.661	
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	29.314	11.681	9.002	3.617	5.492	2.401	3.417	1.543	2.176	1.566	.671	.846	.405
2	.685	2.010	.450	.516	.124	.114	.066	-.077	.067	.034	-.107	-.025	-.129
3	.994	.215	-.134	.006	.046	.033	.063	.058	.050	.028	.055	.051	.021
4	.212	.471	.037	.017	-.008	-.002	-.009	.000	.052	.030	-.049	.035	.001
5	-.122	.277	-.014	.003	.014	.015	.042	.026	-.013	.009	-.018	-.007	-.014
6	.420	.016	.030	.003	.008	-.001	.021	.011	.019	-.014	.015	.007	.007
7	.019	.276	.030	.008	.009	.017	.026	.010	.003	-.001	-.002	.007	.002
8	.095	.315	.019	.008	.011	.009	.028	.003	.004	.012	.002	.012	.000
9	.162	.014	.009	.009	.009	.009	.006	-.008	.005	-.012	-.004	.008	.000
10	-.068	.115	-.001	.001	-.011	.009	-.006	-.008	.005	-.003	-.004	-.009	.000

X = .774		.800		.912	
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	29.314	11.681	9.002	3.617	5.492
2	.685	2.010	.450	.516	.124
3	.994	.215	-.134	.006	.046
4	.212	.471	.037	.017	-.008
5	-.122	.277	-.014	.003	.014
6	.420	.016	.030	.003	.008
7	.019	.276	.030	.008	.009
8	.095	.315	.019	.008	.011
9	.162	.014	.009	.009	.009
10	-.068	.115	-.001	.001	-.011

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.		W1		W2		W3		W4		W5		W6		W10	
GAP FRACTION	N	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG	CPREAL	CPIMAG
1	1	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
2	2	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
3	3	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
4	4	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
5	5	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
6	6	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
7	7	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
8	8	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
9	9	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946
10	10	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946	.005	.946

*** STABILITY PARAMETER ***
 * XI = -.4757 *

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 150 ALPHA-PCL = 6.0 PDP JN-PT 30.01
SUM 30 ALPHA-FR = 2.0 Q-LOMP = 32578
POINT 1 SIGMA = 45. V-REF = 200.16
COMPUTED FREQUENCY = 9.05, K = .0710
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661	
N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	31.555	21.73	9.778	22.98	3.749	24.29	2.277	17.14
2	78.73	33.16	16.86	31.98	10.2	310.36	126	302.05
3	2.242	63.08	134	177.38	0.036	42.74	0.076	46.52
4	244	331.78	075	134.61	0.08	176.73	0.050	355.41
5	448	105.76	032	328.69	0.030	109.39	0.016	255.47
6	503	333.39	015	11.08	0.049	311.75	0.016	84.84
7	078	281.75	041	318.08	0.023	333.27	0.023	321.88
8	329	773.20	026	32.54	0.019	333.26	0.003	216.97
9	162	355.21	020	21.12	0.028	353.22	0.003	22.71
10	133	124.56	008	167.83	0.010	233.92	0.004	218.91

X =	.774	.800	.910																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10	
GAP FRACTION	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	946	9.73	2.569	355.58	1.078	176.96
2	117	152.28	377	209.04	133	166.43
3	026	227.11	116	257.54	019	288.92
4	179	100.92	191	72.77	168	244.36
5	032	311.44	057	314.30	035	73.01
6	088	77.81	096	36.44	064	277.76
7	094	273.81	040	209.31	115	98.74
8	045	137.00	040	209.31	065	216.88
9	034	357.66	014	167.36	049	45.82
10					039	344.79

*** STABILITY PARAMETER ***

* XI = -.4757 *
* *****

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
BLADE DATA, WALL STATIONS

FILE 152 ALPHA-WCL = 5.0 PDP RUN/WT 30.03
RUN 33 ALPHA-CL = 2.0 C-CORP = .32506
POINT 3 SIGMA = 45. V-REF = 199.93
COMPUTED FREQUENCY = 15.44, K = .1213

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	22	649	-6.354	-5.601	-741	-3.344	-1.121	-2.109	.288	-1.515	.769	-1.038	1.296
2	1	042	-1.027	-3.117	-2.05	.219	.005	.057	-.021	.061	.020	.277	.058
3	1	087	-1.502	-1.114	-.004	.097	.086	.014	-.009	.040	-.000	.108	.030
4	1	070	-1.298	-.012	-.028	.012	.006	-.035	-.066	.000	.150	.006	.125
5	1	013	-.024	.027	.025	.005	.005	-.027	.016	-.012	-.001	.001	-.009
6	1	038	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
7	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
8	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
9	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
10	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	22	649	-6.354	-5.601	-741	-3.344	-1.121	-2.109	.288	-1.515	.769	-1.038	1.296
2	1	042	-1.027	-3.117	-2.05	.219	.005	.057	-.021	.061	.020	.277	.058
3	1	087	-1.502	-1.114	-.004	.097	.086	.014	-.009	.040	-.000	.108	.030
4	1	070	-1.298	-.012	-.028	.012	.006	-.035	-.066	.000	.150	.006	.125
5	1	013	-.024	.027	.025	.005	.005	-.027	.016	-.012	-.001	.001	-.009
6	1	038	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
7	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
8	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
9	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
10	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	22	649	-6.354	-5.601	-741	-3.344	-1.121	-2.109	.288	-1.515	.769	-1.038	1.296
2	1	042	-1.027	-3.117	-2.05	.219	.005	.057	-.021	.061	.020	.277	.058
3	1	087	-1.502	-1.114	-.004	.097	.086	.014	-.009	.040	-.000	.108	.030
4	1	070	-1.298	-.012	-.028	.012	.006	-.035	-.066	.000	.150	.006	.125
5	1	013	-.024	.027	.025	.005	.005	-.027	.016	-.012	-.001	.001	-.009
6	1	038	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
7	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
8	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
9	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003
10	1	039	.059	.026	.012	.001	.005	.026	.014	.045	.007	.020	-.003

MODE 1 -- OCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 152 ALPHA-MCL = 6.0 POP RUN-PT 30.03
 RUN 30 ALPHA-PAR = 2.0 Q-COMP = 32502
 POINT 3 SIGMA = 45 V-CREF = 199.93
 COMPUTED FREQUENCY = 15.44, K = .1213

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	23	.516	195.62	5.650	197.54	3.346	182.08	2.129	172.22	1.699	153.11	1.294	128.95
2	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
3	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
4	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
5	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
6	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
7	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
8	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
9	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
10	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	23	.516	195.62	5.650	197.54	3.346	182.08	2.129	172.22	1.699	153.11	1.294	128.95
2	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
3	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
4	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
5	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
6	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
7	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
8	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
9	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
10	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	23	.516	195.62	5.650	197.54	3.346	182.08	2.129	172.22	1.699	153.11	1.294	128.95
2	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
3	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
4	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
5	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
6	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
7	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
8	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
9	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95
10	30	.050	327.37	.377	147.25	.219	175.62	.238	135.03	.479	173.50	1.294	128.95

ORIGINAL LABEL
 OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 152 ALPHA-MCL = 6.0 POP RUN.PT 30.03
RUN 30 ALPHA-PAR = 2.0 O-COMP = .32506
POINT 3 SIGMA = 45. V-REF = 199.93
COMPUTED FREQUENCY = 15.44, K = .1213

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X = .012		.148		.261		.392		.530		.661	
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	28.739	9.397	8.690	3.254	5.263	2.171	3.232	1.554	2.079	.765	1.417
2	1.194	-7.10	-1.57	-1.59	.021	-.018	.005	-.113	.049	-.119	-.019
3	1.200	-1.604	-.085	.105	.026	.032	.001	.032	.046	.020	.018
4	.310	-.147	.048	.055	.004	.035	.004	.009	.044	-.036	.015
5	-.003	.359	-.007	-.021	.007	.019	.025	.034	-.003	.004	-.000
6	.168	-.003	-.058	-.019	.023	-.019	.015	-.034	.003	-.011	-.007
7	-.112	-.053	-.037	-.005	-.036	.011	-.029	-.012	.020	.005	-.018
8	.045	-.015	-.005	-.036	.019	-.023	.004	-.022	.001	-.014	-.007
9	.064	-.095	-.006	-.018	-.009	-.012	-.002	-.010	.000	-.004	-.009
10	-.002	-.057	.005	-.021	.007	-.006	.003	-.010	.001	-.001	.006

X = .774		.860		.910	
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	.166	-.117	-.040	-.299	-.215
2	-.087	-.027	-.023	-.082	-.061
3	-.022	-.013	-.018	-.023	-.004
4	-.000	-.034	-.005	-.009	-.004
5	-.000	-.002	-.005	-.003	-.003
6	.036	-.006	-.009	-.003	-.002
7	-.010	-.006	-.005	-.007	-.010
8	-.035	-.002	-.003	-.001	-.002
9	-.002	-.002	-.002	.004	.003
10	.002	.002	-.000	.004	.002

*** WALL PRESSURES, PER RADIAN ***		W1		W2		W4		W6		W10	
WALL NO.	GAP FRACTION	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG
1	-.522	1	1.542	1	2.184	1	11.022	1	1.810	1	4.439
2	-.314	2	-.877	2	-.573	2	-.243	2	-.331	2	-.439
3	-.115	3	-.274	3	-.167	3	-.623	3	-.141	3	.589
4	-.111	4	-.099	4	.094	4	.210	4	.008	4	.155
5	-.026	5	-.337	5	-.041	5	.001	5	-.004	5	-.052
6	-.019	6	-.023	6	-.024	6	.066	6	-.052	6	.210
7	-.036	7	-.014	7	-.001	7	.074	7	-.003	7	.004
8	-.062	8	-.015	8	-.008	8	-.043	8	.006	8	-.012
9	.034	9	-.013	9	-.033	9	-.012	9	.011	9	-.021
10	.025	10	-.006	10	.011	10	-.044	10	.001	10	.003

*** STABILITY PARAMETER

* XI = -.3861 *

ORIGINAL PAGE 11
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 152 ALPHA-WCL = 6.0 PDP RUN-PT 30.33
MUN 30 ALPHA-RAR = 25.0 Q-COMP = .32506
POINT 33 SIGMA = 45.0 V-REF = .199.93
COMPUTED FREQUENCY = 15.44, K = .1213

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE ***
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
		.012		.064		.148		.261		.392		.530	
1	30	237	18.11	9.280	20.53	5.093	22.42	3.586	25.67	2.125	20.19	1.499	18.94
2	30	739	25.21	6.19	28.70	.178	27.94	.113	27.41	.050	23.04	.021	28.97
3	30	33	33.43	.135	128.96	.033	34.48	.068	33.05	.057	320.82	.021	45.12
4	30	359	39.03	.022	48.02	.035	79.22	.041	52.53	.011	198.20	.010	266.56
5	30	168	359.10	.061	198.06	.030	219.19	.037	293.71	.021	286.79	.019	218.45
6	30	130	234.42	.038	106.92	.038	162.66	.031	202.49	.011	193.92	.018	171.03
7	30	114	303.91	.019	201.81	.015	332.27	.023	321.05	.010	266.38	.012	323.54
8	30	557	268.12	.022	263.03	.011	323.27	.011	287.27	.001	359.12	.006	223.92
9	30												
10	30												

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
		.774		.910									
1	203	324.83		229	200.06								
2	197.45		.064	196.75									
3	209.45		.007	328.66									
4	265.07		.005	180.53									
5	315.39		.011	241.09									
6	199.59		.003	41.44									
7	11.50		.004	57.76									
8	201.40		.003	47.59									
9	41.61												
10													

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP	MAG	PHI	CP	MAG	PHI	CP	MAG	PHI	CP	MAG	PHI
				.125				.125						
1	1.628	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28
2	339	164	164	164	164	164	164	164	164	164	164	164	164	164
3	149	138.79	138.79	138.79	138.79	138.79	138.79	138.79	138.79	138.79	138.79	138.79	138.79	138.79
4	330	230.80	230.80	230.80	230.80	230.80	230.80	230.80	230.80	230.80	230.80	230.80	230.80	230.80
5	15	166.27	166.27	166.27	166.27	166.27	166.27	166.27	166.27	166.27	166.27	166.27	166.27	166.27
6	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91
7	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91
8	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91
9	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91
10	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91	338.91

*** STABILITY PARAMETER

* XI = -.3861 *

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 154 ALPHA-MCL = 6.0 POP RUN.PT 30.05
RUN 30 ALPHA-BAR = 2.0 O-COMP = .32779
POINT 5 SIGMA = 45. V-REF = 200.79
COMPUTED FREQUENCY = 19.09, K = .1493

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAL, ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	-22	.052	-5.887	-2.995	-1.773	-1.199	-.637	-.210
2	-.096	-.048	-.025	-.011	-.073	-.053	.853	1.191
3	-1.273	-1.175	-.021	-.016	-.053	-.017	.043	.130
4	-.030	-.197	-.043	-.033	-.044	-.045	.019	.017
5	-.030	-.237	-.061	-.038	-.021	-.011	.004	-.006
6	-.035	-.025	-.020	-.008	-.005	-.011	.016	-.012
7	-.040	-.061	-.013	-.002	-.005	-.001	-.007	-.002
8	-.076	-.032	-.003	-.002	-.004	-.004	.017	-.004
9	-.050	-.029	-.011	-.015	-.002	.005	.011	-.002
10	-.052	-.014	-.013	-.015	-.012	.009	-.022	-.010

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	-.089	1.220	-.020	-.035	1.141	2.541	2.124	1.337
2	.142	.036	-.017	-.012	-.015	-.705	1.721	1.550
3	.017	.020	-.019	-.019	-.066	-.048	-.154	-.080
4	-.004	-.021	-.014	-.007	-.038	-.054	-.024	-.029
5	.006	-.011	-.007	-.003	-.006	-.007	-.004	-.010
6	.011	-.006	-.005	-.001	-.001	.001	-.003	-.004
7	-.003	.004	-.002	-.003	-.003	-.000	-.004	-.004
8	-.002	.005	-.001	-.005	-.002	-.001	-.004	-.005
9	-.002	.032	-.007	-.001	-.005	.005	-.009	-.002
10	-.002	.014	-.015	-.007	-.029	.021	-.025	-.017

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	.750	1.312	.644	.435	.027	-.144	-.207
2	.059	-.067	-.057	-.060	.083	.054	.055
3	.009	-.028	-.004	-.039	.017	.004	.027
4	-.002	.010	-.004	-.005	.009	.003	.004
5	.003	-.008	-.004	-.002	.002	.002	.005
6	.001	.012	-.017	-.011	.006	.007	.008
7	.003	.007	-.007	-.013	-.005	.007	.007
8	-.004	.023	-.004	-.004	.005	.006	.004
9	-.008	.023	-.007	-.002	-.002	.002	.002
10	-.008	.023	-.004	-.002	-.003	.002	.002

ORIGINAL PAGE IS
OF POOR QUALITY.

MODE 1 -- OCWJ PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 154 ALPHA-MCL = 6.0 POP RUN-PT 30.05
RUN 30 ALPHA-EAR = 2.0 O-COMP = 32779
POINT 5 SIGMA = 45. V-REF = 200.79
COMPUTED FREQUENCY = 19.09, K = .1493
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP	.012-UPPER PHI	CP	.062-UPPER PHI	CP	.148-UPPER PHI	CP	.261-UPPER PHI	CP	.392-UPPER PHI	CP	.530-UPPER PHI	CP	.661-UPPER PHI
1	22	.624	194.95	5	.284	190.12	3	.624	187.91	1	.774	181.70	1	.096	128.85
2	399	353.03	.101	196	82.80	.101	101	.075	346.62	1	.251	163.36	1	.135	151.92
3	1.735	1226.79	.028	91.75	.059	163.86	.054	188.70	.031	.069	170.71	.021	.021	.021	50.79
4	.214	253.08	.042	300.00	.029	293.25	.029	224.01	.015	.015	142.27	.012	.021	.021	273.67
5	.250	253.14	.042	340.71	.025	245.89	.021	224.24	.015	.015	345.17	.012	.012	.012	296.92
6	.673	186.14	.011	324.70	.002	309.86	.012	115.34	.013	.013	307.25	.012	.012	.012	325.71
7	.082	58.66	.019	81.90	.017	343.96	.017	73.14	.018	.018	94.20	.017	.017	.017	168.64
8	.058	203.05	.012	271.24	.012	117.37	.017	103.76	.005	.005	75.10	.017	.017	.017	128.45
9	.083	350.62	.021	47.59	.021	278.08	.003	120.60	.027	.027	316.06	.022	.022	.022	334.04
10															86.59

X	N	CP	.774-UPPER PHI	CP	.860-UPPER PHI	CP	.910-UPPER PHI	CP	.012-LOWER PHI	CP	.062-LOWER PHI	CP	.148-LOWER PHI	CP	.261-LOWER PHI
1	1	.223	94.17	1	.195	90.97	1	.142	91.76	6	.696	22.30	2	.734	39.03
2	146	14.29	.025	43.90	.027	43.90	.025	48.25	.069	.069	24.64	.036	.036	.036	304.16
3	.022	259.57	.014	247.64	.012	247.64	.014	255.75	.006	.006	213.10	.047	.047	.047	318.16
4	.013	298.66	.009	298.85	.012	298.85	.009	306.83	.006	.006	259.81	.044	.044	.044	323.70
5	.012	329.21	.006	327.51	.006	327.51	.006	335.25	.003	.003	292.20	.011	.011	.011	350.71
6	.005	123.80	.001	86.22	.001	86.22	.001	122.30	.005	.005	90.67	.017	.017	.017	286.95
7	.003	116.00	.001	169.04	.001	169.04	.001	172.91	.009	.009	279.20	.015	.015	.015	104.36
8	.003	129.71	.001	108.70	.001	108.70	.001	88.70	.023	.023	101.80	.014	.014	.014	278.36
9	.016	119.85	.017	146.56	.017	146.56	.017	122.18	.030	.030	159.80	.025	.025	.025	151.53
10															182.08

X	N	CP	.392-LOWER PHI	CP	.530-LOWER PHI	CP	.661-LOWER PHI	CP	.774-LOWER PHI	CP	.860-LOWER PHI	CP	.910-LOWER PHI	CP	
1	1	.526	59.25	1	.660	67.06	1	.670	70.72	1	.061	97.81	1	.213	99.82
2	.089	311.27	.027	351.35	.029	351.35	.027	352.79	.017	.017	103	.022	.022	.022	335.59
3	.029	251.42	.010	267.01	.006	267.01	.010	261.40	.015	.015	.012	.012	.012	.012	281.16
4	.008	292.49	.004	279.17	.004	279.17	.004	291.81	.011	.011	.011	.011	.011	.011	293.74
5	.008	292.49	.004	274.46	.004	274.46	.004	296.28	.013	.013	.010	.010	.010	.010	317.42
6	.005	307.33	.005	316.32	.005	316.32	.005	313.28	.006	.006	.008	.008	.008	.008	127.69
7	.005	157.79	.009	150.94	.009	150.94	.009	156.62	.007	.007	.003	.003	.003	.003	306.96
8															
9															
10															

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

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FILE 154 ALPHA-MCL = 6.0 PDP RUN.PT 30.05
FUN 33 ALPHA-PAR = 2.0 C-COMP = .32779
POINT 5 SIGMA = 45. V-PEF = 290.79
COMPUTED FREQUENCY = 19.09, K = .1493

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FOUPIER COEFFICIENTS, REAL & IMAGINARY COMPIUTED FREQUENCY = 19.09, K =
**** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ****

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[illegible]

X = .774		.860		.910		N		CNREAL		CNIMAG		N		CHREAL		CHIMAG	
DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI	DELCPPI
116	.301	124	.144	172	.054	1	2.873	1.121	1	.969	.352	1	.969	.352	1	.969	.352
.059	.018	.016	.007	.011	.001	2	.063	.140	2	.012	.032	2	.012	.032	2	.012	.032
.013	.007	.011	.007	.008	.004	3	.004	.012	3	.002	.005	3	.002	.005	3	.002	.005
.005	.003	.007	.001	.004	.002	4	.001	.004	4	.001	.001	4	.001	.001	4	.001	.001
.002	.007	.007	.001	.001	.004	5	.003	.004	5	.001	.001	5	.001	.001	5	.001	.001
.003	.007	.007	.010	.005	.001	6	.007	.016	6	.001	.001	6	.001	.001	6	.001	.001
.005	.003	.017	.001	.000	.001	7	.012	.065	7	.001	.001	7	.001	.001	7	.001	.001
.005	.003	.010	.001	.010	.001	8	.012	.065	8	.001	.001	8	.001	.001	8	.001	.001
.005	.003	.001	.001	.010	.001	9	.012	.065	9	.001	.001	9	.001	.001	9	.001	.001
.005	.003	.001	.001	.010	.001	10	.012	.065	10	.001	.001	10	.001	.001	10	.001	.001

*** STABILITY PARAMETER

*** ALL PRESSURES, PER RADIAN ***

WALL NO. SAP FRACTION	W1 -125 CPREAL CPIMAG	W2 -300 CPREAL CPIMAG	W4 -125 CPREAL CPIMAG	W6 -500 CPREAL CPIMAG	W10 -1.125 CPREAL CPIMAG	* XI = -.3529 *	*****
1	1.136	2.624	-10.446	-1.648	-4.127	-5.559	
2	1.184	2.624	-10.446	-1.648	-4.127	-5.559	
3	1.184	2.624	-10.446	-1.648	-4.127	-5.559	
4	1.184	2.624	-10.446	-1.648	-4.127	-5.559	
5	1.184	2.624	-10.446	-1.648	-4.127	-5.559	
6	1.184	2.624	-10.446	-1.648	-4.127	-5.559	
7	1.184	2.624	-10.446	-1.648	-4.127	-5.559	
8	1.184	2.624	-10.446	-1.648	-4.127	-5.559	
9	1.184	2.624	-10.446	-1.648	-4.127	-5.559	
10	1.184	2.624	-10.446	-1.648	-4.127	-5.559	

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCAT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 154 ALPHA-MCL = 6.0 PDP RUN/PT 30.05
RUM 3C ALPHA-FAF = 2.0 Q-COMP = 32779
POINT 5 SIGMA = 45.0
COMPUTED FREQUENCY = 19.09, K = .1493
V-REF = 200.79

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	29.478	16.61	8.989	20.79	5.547	22.66	3.499	27.26	2.197	25.72	1.493	26.94	4.67
2	1.684	277.93	.561	202.71	.164	271.34	.086	275.08	.102	269.47	.176	261.35	235.77
3	1.684	41.32	.051	104.33	.051	320.17	.062	353.83	.073	348.47	.030	288.94	306.66
4	2.19	289.76	.016	140.55	.009	221.39	.036	272.26	.036	272.26	.014	258.68	274.72
5	250	69.90	.016	201.49	.040	160.87	.030	33.16	.018	200.35	.004	161.92	158.65
6	230	6.91	.024	141.35	.010	192.72	.024	291.10	.011	138.23	.015	192.04	207.12
7	.068	239.94	.007	216.92	.017	94.12	.010	171.50	.001	296.88	.016	174.61	108.56
8	.078	17.25	.026	266.15	.030	283.11	.031	281.92	.034	271.80	.025	285.77	310.54
9	.069	43.90	.031	99.67	.025	115.26	.006	167.92	.009	146.53	.035	163.84	269.83
10	.113	167.99	.044	167.33	.042	232.61	.035	217.80	.028	233.26	.020	241.48	286.30

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	131	27.55	.190	229.19	.180	162.68	.141	21.31	.141	264.15	1.034	20.01	290.87
2	.059	182.28	.087	233.50	.068	189.34	.006	16.76	.006	16.76	.028	38.39	38.39
3	.014	270.41	.013	326.80	.011	313.79	.012	256.50	.012	256.50	.003	231.00	231.00
4	.006	216.74	.007	186.62	.005	267.52	.002	270.16	.002	270.16	.009	59.11	59.11
5	.006	211.45	.001	187.54	.004	210.73	.002	299.47	.002	299.47	.003	8.90	8.90
6	.008	104.18	.007	174.44	.004	100.83	.005	124.72	.005	124.72	.001	235.06	235.06
7	.011	315.78	.009	18.28	.009	346.95	.018	294.21	.018	294.21	.002	288.29	288.29
8	.003	266.55	.009	271.52	.002	280.99	.016	115.71	.016	115.71	.003	92.27	92.27
9	.009	301.50	.017	357.20	.010	352.59	.019	218.97	.019	218.97	.006	186.92	186.92

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.188	96.60	2.645	7.09	10.575	168.97	1.410	167.91	6.923	253.40	.501	31.79	.501	31.79
2	.093	31.61	.624	246.15	1.154	304.57	.095	31.94	.455	331.28	.455	331.28	.455	331.28
3	.030	16.95	.149	65.86	.669	201.57	.017	73.65	.078	119.46	.078	119.46	.078	119.46
4	.071	302.92	.161	244.24	.404	310.31	.047	277.11	.088	67.63	.027	277.84	.027	277.84
5	.009	249.37	.011	49.89	.028	199.59	.007	336.49	.026	277.84	.026	277.84	.026	277.84
6	.031	8.20	.041	273.44	.033	328.13	.019	316.68	.033	328.13	.033	328.13	.033	328.13
7	.046	160.19	.013	30.76	.026	55.32	.015	86.38	.026	55.32	.026	55.32	.026	55.32
8	.034	218.26	.012	358.64	.049	159.91	.012	93.73	.033	254.52	.033	254.52	.033	254.52
9	.005	287.93	.011	116.91	.039	287.93	.004	195.13	.019	41.49	.019	41.49	.019	41.49
10	.057	217.28	.021	103.57	.020	25.62	.016	87.82						

* XI = -.3529 *
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OCWT PERIODICITY TEST
 MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 156 ALPHA-MCL = 6.0 POP RUN-PT 31.04
 RUN 31 ALPHA-PAR = 2.0 Q-COMP = 32399
 POINT 1 SIGMA = 90. V-REF = 199.62
 COMPUTED FREQUENCY = 9.11, K = .0717

FOURIER COEFFICIENTS, REAL & IMAGINARY
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	24	-.995	-6.665	-.807	-1.014	-.355	-.348	-2.098	-.300	-.120	-.628	-.622	-.467	1.134	1.134	1.134	1.134
2	23	-.937	-.760	-.261	-.080	-.317	-.123	-.259	-.259	-.123	-.259	-.123	-.310	1.262	1.262	1.262	1.262
3	22	-.843	-.595	-.140	-.033	-.282	-.121	-.209	-.209	-.121	-.209	-.121	-.325	1.173	1.173	1.173	1.173
4	21	-.772	-.478	-.049	-.034	-.140	-.018	-.092	-.092	-.018	-.092	-.018	-.043	1.061	1.061	1.061	1.061
5	20	-.628	-.275	-.049	-.035	-.057	-.141	-.076	-.076	-.141	-.050	-.131	-.041	1.132	1.132	1.132	1.132
6	19	-.499	-.128	-.042	-.037	-.015	-.025	-.025	-.025	-.037	-.015	-.063	-.016	1.049	1.049	1.049	1.049
7	18	-.449	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
8	17	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
9	16	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
10	15	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	24	-.995	-6.665	-.807	-1.014	-.355	-.348	-2.098	-.300	-.120	-.628	-.622	-.467	1.134	1.134	1.134	1.134
2	23	-.937	-.760	-.261	-.080	-.317	-.123	-.259	-.259	-.123	-.259	-.123	-.310	1.262	1.262	1.262	1.262
3	22	-.843	-.595	-.140	-.033	-.282	-.121	-.209	-.209	-.121	-.209	-.121	-.325	1.173	1.173	1.173	1.173
4	21	-.772	-.478	-.049	-.034	-.140	-.018	-.092	-.092	-.018	-.092	-.018	-.043	1.061	1.061	1.061	1.061
5	20	-.628	-.275	-.049	-.035	-.057	-.141	-.076	-.076	-.141	-.050	-.131	-.041	1.132	1.132	1.132	1.132
6	19	-.499	-.128	-.042	-.037	-.015	-.025	-.025	-.025	-.037	-.015	-.063	-.016	1.049	1.049	1.049	1.049
7	18	-.449	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
8	17	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
9	16	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
10	15	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	24	-.995	-6.665	-.807	-1.014	-.355	-.348	-2.098	-.300	-.120	-.628	-.622	-.467	1.134	1.134	1.134	1.134
2	23	-.937	-.760	-.261	-.080	-.317	-.123	-.259	-.259	-.123	-.259	-.123	-.310	1.262	1.262	1.262	1.262
3	22	-.843	-.595	-.140	-.033	-.282	-.121	-.209	-.209	-.121	-.209	-.121	-.325	1.173	1.173	1.173	1.173
4	21	-.772	-.478	-.049	-.034	-.140	-.018	-.092	-.092	-.018	-.092	-.018	-.043	1.061	1.061	1.061	1.061
5	20	-.628	-.275	-.049	-.035	-.057	-.141	-.076	-.076	-.141	-.050	-.131	-.041	1.132	1.132	1.132	1.132
6	19	-.499	-.128	-.042	-.037	-.015	-.025	-.025	-.025	-.037	-.015	-.063	-.016	1.049	1.049	1.049	1.049
7	18	-.449	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
8	17	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
9	16	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042
10	15	-.450	-.016	-.018	-.038	-.012	-.044	-.031	-.031	-.044	-.012	-.033	-.016	1.042	1.042	1.042	1.042

ORIGINAL DATA IS
 OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 150 ALPHA-PCL = 6.0 PDP RUN-PI 31.74
RUM 31 ALPHA-PAR = 6.0 O-COMP = 32.99
POINT 1 SIGMA = 90.0 V-REF = 199.62
COMPUTED FREQUENCY = 9.11, N = .0717

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	062-UPPER CP-MAG	UPPER PHI	146-UPPER CP-MAG	UPPER PHI	261-UPPER CP-MAG	UPPER PHI	392-UPPER CP-MAG	UPPER PHI	530-UPPER CP-MAG	UPPER PHI	661-UPPER CP-MAG	UPPER PHI
1	25	.559	195.11	5.895	199.90	3.373	185.91	2.101	176.71	1.742	159.07	1.854	146.24	1.817	129.18
2	25	.773	100.20	.433	173.95	.340	23.20	.287	16.50	.342	22.14	.436	28.03	.434	25.81
3	25	.879	235.20	.273	16.95	.307	23.20	.287	16.50	.277	22.14	.308	28.03	.389	26.99
4	25	.935	25.62	.150	30.91	.142	7.25	.096	25.48	.094	69.68	.085	41.40	.085	42.35
5	25	.686	203.63	.060	35.11	.019	15.29	.016	16.36	.039	46.68	.049	41.40	.041	26.99
6	25	.331	259.05	.144	250.05	.152	248.11	.137	236.26	.140	249.27	.138	252.65	.131	250.40
7	25	.314	77.28	.146	113.28	.129	121.88	.099	120.95	.068	110.25	.052	108.22	.043	106.81
8	25	.151	174.02	.029	246.30	.049	235.11	.025	230.60	.033	274.85	.032	259.53	.021	255.72
9	25	.654	165.10	.045	137.36	.030	181.76	.020	172.92	.019	180.01	.020	182.09	.014	206.12
10	25														

X	N	CP-MAG	UPPER PHI	062-UPPER CP-MAG	UPPER PHI	146-UPPER CP-MAG	UPPER PHI	261-UPPER CP-MAG	UPPER PHI	392-UPPER CP-MAG	UPPER PHI	530-UPPER CP-MAG	UPPER PHI	661-UPPER CP-MAG	UPPER PHI
1	1	.554	123.95	1.273	119.17	1.421	117.92	9.245	19.76	5.800	24.81	3.859	27.67	2.802	31.47
2	1	.355	43.78	.370	26.65	.374	25.24	1.405	310.80	.604	309.72	.319	27.09	.323	357.21
3	1	.083	49.25	.081	46.22	.050	39.94	.050	12.42	.166	104.70	.035	37.45	.084	42.83
4	1	.124	249.77	.037	250.04	.061	39.28	.061	99.92	.230	62.16	.032	69.15	.030	51.81
5	1	.032	108.91	.129	107.51	.126	101.23	.080	267.25	.099	251.56	.105	251.62	.104	253.47
6	1	.032	259.60	.046	107.51	.033	171.82	.032	187.94	.008	22.58	.017	84.42	.024	100.29
7	1	.009	217.62	.037	255.49	.010	273.30	.081	30.13	.059	198.77	.048	212.92	.043	222.43
8	1			.012	215.80	.046	256.06	.055	112.50	.035	248.91	.015	232.16	.008	257.87
9	1														
10	1														

X	N	CP-MAG	UPPER PHI	062-UPPER CP-MAG	UPPER PHI	146-UPPER CP-MAG	UPPER PHI	261-UPPER CP-MAG	UPPER PHI	392-UPPER CP-MAG	UPPER PHI	530-UPPER CP-MAG	UPPER PHI	661-UPPER CP-MAG	UPPER PHI
1	1	.534	35.54	1.711	38.86	.835	47.81	.835	59.66	.522	75.11	.471	119.29	.471	129.18
2	1	.313	21.97	.356	24.64	.321	25.25	.321	24.66	.309	23.71	.214	26.54	.214	25.81
3	1	.091	41.55	.095	39.12	.100	35.55	.100	65.33	.091	32.07	.042	32.07	.042	32.07
4	1	.102	245.59	.124	244.28	.029	24.67	.029	24.67	.110	253.61	.114	245.12	.114	245.12
5	1	.034	94.28	.047	92.56	.113	98.18	.113	98.18	.043	103.42	.044	103.80	.043	103.80
6	1	.035	233.95	.041	240.85	.038	237.89	.038	237.89	.031	250.02	.031	244.07	.031	244.07
7	1	.003	219.67	.003	274.64	.008	243.69	.008	243.69	.002	206.74	.002	222.51	.002	222.51
8	1														
9	1														
10	1														

ORIGINAL PAGE IS
OF POOR QUALITY

WALL NO. W1
GAP FRACTION --.125

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 156 ALPHA-PCL = 6.0 POP RUL-PT 31.04
RUM 31 ALPHA-RAR = 2.0 O-COMP = .32399
POINT 1 SIGMA = 90. V-REF = .199.62
COMPUTED FREQUENCY = 9.11, K = .0717

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012	PHI	DELCPH	.064	PHI	DELCPH	.148	PHI	DELCPH	.261	PHI	DELCPH	.392	PHI	DELCPH	.530	PHI	DELCPH	.661	PHI
1	34	.771	10.34	11.398	17.17	7.103	17.53	4.684	25.65	3.151	225.81	8.09	2.850	358.76	1.952	340.84					
2	137	300.06	.918	266.65	.219	264.29	.107	253.56	.121	225.81	.121	225.81	.196	268.67	.115	202.80					
3	3.073	51.94	.314	105.92	.622	323.74	.042	353.11	.337	35.06	.337	35.06	.029	335.41	.074	16.63					
4	390	207.58	.154	102.12	.622	155.21	.041	176.23	.045	309.46	.045	309.46	.019	223.40	.007	289.74					
5	.654	81.97	.018	256.21	.526	107.05	.041	176.23	.045	309.46	.045	309.46	.026	223.40	.007	289.74					
6	159	17.32	.045	66.76	.547	160.27	.049	176.23	.045	309.46	.045	309.46	.026	223.40	.007	289.74					
7	.274	75.31	.135	297.78	.519	334.88	.028	319.08	.036	305.43	.036	305.43	.014	120.70	.014	272.68					
8	.190	2.39	.085	150.28	.634	146.64	.009	92.72	.015	171.62	.015	171.62	.018	196.74	.018	169.88					
9	.084	311.99	.066	287.81	.030	323.20	.023	314.98	.014	319.55	.014	319.55	.014	316.74	.014	99.88					
10																					

X	N	.774	PHI	DELCPH	.800	PHI	DELCPH	.910	PHI	N	CM-MAG	PHIM
1	1.400	334.61	.954	323.21	.601	296.84	.227	177.73	.094	10.01	1.220	20.70
2	.122	222.62	.118	279.40	.227	177.73	.227	177.73	.094	10.01	.045	300.39
3	.019	118.48	.023	222.72	.020	219.76	.020	219.76	.022	160.80	.009	150.54
4	.019	269.37	.018	223.48	.007	340.66	.007	340.66	.012	99.43	.009	158.24
5	.009	16.97	.021	50.85	.010	81.60	.010	81.60	.040	43.67	.013	86.24
6	.014	180.33	.004	341.25	.002	221.57	.002	221.57	.023	303.28	.007	291.44
7	.012	180.31	.007	102.25	.002	74.55	.002	74.55	.041	133.53	.006	107.17
8	.004	341.43	.004	56.70	.003	125.27	.003	125.27	.019	50.46	.005	101.50
9									.018	313.22	.005	303.27
10												

*** STABILITY PARAMETER

* XI = -.4313
*

WALL NO.	GAP FRACTION	N	W1	W2	W4	W6	W10	
			CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2.171	51.93	3.355	8.75	11.793	190.51	1.662	166.42
2	.323	44.38	.174	178.14	1.464	324.70	.391	223.98
3	.454	41.67	.666	351.95	.599	309.39	.456	35.66
4	.137	53.60	.157	82.54	.057	294.75	.053	42.60
5	.061	81.23	.042	262.14	.057	259.33	.164	252.84
6	.173	292.80	.180	262.14	.259	259.33	.062	109.64
7	.067	149.51	.328	116.35	.131	228.38	.041	265.01
8	.074	283.82	.058	325.77	.043	246.88	.022	294.17
9	.027	283.82	.043	325.77	.014	246.88	.022	294.17
10	.033	270.81	.044	226.92	.121	158.29	.024	178.23

*** WALL PRESSURES, PER RADIAN ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 158 ALPHA-WCL = 6.0 POP RUN-PT 31.06
RUN 31 ALPHA-RAP = 2.0 Q-COMP = 31951
POINT 3 SIGMA = 90.0 V-REF = 198.21
COMPUTED FREQUENCY = 15.53, K = .1231

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	24	851	-5.857	-6.010	-0.157	-3.539	-0.160	-2.299	-0.242	-1.884	-0.711
2	197	-2.197	-0.009	-0.135	-0.009	-0.030	-0.086	-0.064	-0.138	-0.090	-0.097
3	127	-0.427	-0.046	-0.074	-0.055	-0.026	-0.056	-0.040	-0.038	-0.023	-0.031
4	239	-0.239	-0.220	-0.045	-0.070	-0.077	-0.004	-0.091	-0.038	-0.048	-0.015
5	342	-0.342	-0.083	-0.045	-0.006	-0.006	-0.008	-0.013	-0.019	-0.002	-0.002
6	184	-0.184	-0.136	-0.067	-0.034	-0.005	-0.034	-0.007	-0.015	-0.021	-0.016
7	121	-0.121	-0.096	-0.067	-0.014	-0.004	-0.014	-0.005	-0.002	-0.009	-0.013
8	067	-0.067	-0.023	-0.017	-0.017	-0.017	-0.017	-0.006	-0.004	-0.009	-0.008
9	089	-0.089	-0.023	-0.017	-0.017	-0.017	-0.017	-0.006	-0.004	-0.009	-0.008
10											

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	24	851	-5.857	-6.010	-0.157	-3.539	-0.160	-2.299	-0.242	-1.884	-0.711
2	197	-2.197	-0.009	-0.135	-0.009	-0.030	-0.086	-0.064	-0.138	-0.090	-0.097
3	127	-0.427	-0.046	-0.074	-0.055	-0.026	-0.056	-0.040	-0.038	-0.023	-0.031
4	239	-0.239	-0.220	-0.045	-0.070	-0.077	-0.004	-0.091	-0.038	-0.048	-0.015
5	342	-0.342	-0.083	-0.045	-0.006	-0.006	-0.008	-0.013	-0.019	-0.002	-0.002
6	184	-0.184	-0.136	-0.067	-0.034	-0.005	-0.034	-0.007	-0.015	-0.021	-0.016
7	121	-0.121	-0.096	-0.067	-0.014	-0.004	-0.014	-0.005	-0.002	-0.009	-0.013
8	067	-0.067	-0.023	-0.017	-0.017	-0.017	-0.017	-0.006	-0.004	-0.009	-0.008
9	089	-0.089	-0.023	-0.017	-0.017	-0.017	-0.017	-0.006	-0.004	-0.009	-0.008
10											

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	24	851	-5.857	-6.010	-0.157	-3.539	-0.160	-2.299	-0.242	-1.884	-0.711
2	197	-2.197	-0.009	-0.135	-0.009	-0.030	-0.086	-0.064	-0.138	-0.090	-0.097
3	127	-0.427	-0.046	-0.074	-0.055	-0.026	-0.056	-0.040	-0.038	-0.023	-0.031
4	239	-0.239	-0.220	-0.045	-0.070	-0.077	-0.004	-0.091	-0.038	-0.048	-0.015
5	342	-0.342	-0.083	-0.045	-0.006	-0.006	-0.008	-0.013	-0.019	-0.002	-0.002
6	184	-0.184	-0.136	-0.067	-0.034	-0.005	-0.034	-0.007	-0.015	-0.021	-0.016
7	121	-0.121	-0.096	-0.067	-0.014	-0.004	-0.014	-0.005	-0.002	-0.009	-0.013
8	067	-0.067	-0.023	-0.017	-0.017	-0.017	-0.017	-0.006	-0.004	-0.009	-0.008
9	089	-0.089	-0.023	-0.017	-0.017	-0.017	-0.017	-0.006	-0.004	-0.009	-0.008
10											

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 158 ALPHA-MCL = 6.0 PDP RUN-PT 31.06
RUN 31 ALPHA-BAR = 2.0 O-COMP = 31951
POINT 31 SIGMA = 90. V-REF = 198.21
COMPUTED FREQUENCY = 15.53, N = 1231
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	25	.542	193.26	.049	166.55	.542	193.26	.311	173.99	.153	159.32	.110	144.31	.039	131.56
2	3	.253	271.20	.253	120.10	.091	250.62	.065	245.18	.073	220.43	.012	172.61	.055	169.78
3	253	.325	222.73	.087	329.10	.061	324.15	.055	317.07	.027	204.97	.012	172.61	.008	169.78
4	3	.325	222.73	.087	329.10	.061	324.15	.055	317.07	.027	204.97	.012	172.61	.008	169.78
5	6	.325	222.73	.087	329.10	.061	324.15	.055	317.07	.027	204.97	.012	172.61	.008	169.78
6	7	.325	222.73	.087	329.10	.061	324.15	.055	317.07	.027	204.97	.012	172.61	.008	169.78
7	7	.325	222.73	.087	329.10	.061	324.15	.055	317.07	.027	204.97	.012	172.61	.008	169.78
8	9	.325	222.73	.087	329.10	.061	324.15	.055	317.07	.027	204.97	.012	172.61	.008	169.78
9	9	.325	222.73	.087	329.10	.061	324.15	.055	317.07	.027	204.97	.012	172.61	.008	169.78
10	10	.325	222.73	.087	329.10	.061	324.15	.055	317.07	.027	204.97	.012	172.61	.008	169.78

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	.758	127.45	.558	134.27	.394	123.17	.920	20.64	.445	29.51	.787	33.78	.797	41.23
2	3	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98
3	4	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98
4	5	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98
5	5	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98
6	7	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98
7	7	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98
8	8	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98
9	9	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98
10	10	.040	224.74	.007	261.19	.005	273.72	.115	147.99	.292	136.01	.352	165.01	.028	188.98

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	1	.906	49.37	.871	56.49	.326	69.19	.178	85.13	.960	104.50	.237	114.38	.237	114.38
2	3	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28
3	3	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28
4	5	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28
5	5	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28
6	7	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28
7	7	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28
8	9	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28
9	9	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28
10	10	.022	218.00	.026	220.92	.076	343.65	.062	189.67	.213	152.53	.037	128.28	.037	128.28

MODE 1 -- OCWT PERIODICITY TEST
CENTFF BLADE DATA, WALL STATIONS

FILE 158 ALPHA-MCL = 6.0 PDP RUN-PT 31.06
RUN 31 ALPHA-PAR = 2.0 Q-COMP = .31951
POINT 3 SIGMA = 90. V-REF = 198.21
COMPUTED FREQUENCY = 15.53, K = .1231

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	.012		.062		.148		.261		.392		.530		.661	
		DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP
1	1	33.215	9.004	10.749	3.371	6.686	2.265	4.402	1.601	3.125	.736	2.747	.329	1.824	-.286
2	2	307	-1.941	-.081	-.795	-.190	-.185	-.151	-.069	-.099	-.051	-.114	-.187	-.082	-.027
3	3	2.096	-.066	-.062	-.298	-.033	-.047	-.026	-.032	.345	-.027	-.020	.006	-.082	-.020
4	4	-.377	-.232	-.018	-.048	-.036	-.041	-.039	-.038	-.022	-.021	-.023	.012	.004	-.007
5	5	316	-.093	-.056	-.005	-.013	-.007	-.011	-.033	-.002	-.019	.005	.000	.005	-.004
6	6	-.085	.154	-.011	.009	-.013	-.042	-.015	-.019	-.026	-.019	.001	.008	-.018	-.007
7	7	196	.025	.016	.025	.013	.010	.014	.004	.014	.013	-.001	.015	.000	.019
8	8	.081	.025	.007	.013	.014	.001	.010	.004	.000	.007	-.001	.009	.000	-.006
9	9	.086	-.035	.026	-.034	.024	-.014	.009	-.005	.012	-.007	.008	-.002	.003	-.001
10	10														

X	N	.774		.866		.913		CMREAL		CMIMAG	
		DELCP	DELCP	DELCP	DELCP	DELCP	DELCP	CMREAL	CMREAL	CMIMAG	CMIMAG
1	1	1.168	-.220	.638	-.358	.342	-.173	4.189	1.133	.399	.399
2	2	-.054	.003	-.042	-.145	-.002	-.005	-.104	.003	-.051	-.051
3	3	-.022	.048	.017	-.007	.001	.002	.060	.028	.006	.006
4	4	-.016	.001	.006	.005	.004	.004	.008	-.004	.002	.002
5	5	-.007	.010	.011	.005	.005	.002	.009	.002	.003	.003
6	6	-.004	.014	.011	.006	.002	.002	.017	-.002	.005	.005
7	7	-.001	.014	.004	.006	.002	.011	.011	.005	.001	.001
8	8	-.000	.015	.005	.000	.007	.014	.008	.002	.001	.001
9	9	-.000	.014	.005	.000	.008	.007	.011	.004	.002	.002
10	10										

*** STABILITY PARAMETER

* XI = -.3991 *

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	N	.125		.000		.125		.000		.125		.000		.125		.000	
		CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL	CPREAL
1	1	.698	2.133	2.835	1.119	-.111	-.870	-.174	-.174	-.174	-.174	-.174	-.174	-.174	-.174	-.174	-.174
2	2	-.295	-.202	-.717	-.367	-.367	-.806	-.245	-.245	-.245	-.245	-.245	-.245	-.245	-.245	-.245	-.245
3	3	-.053	.047	.066	.071	.071	.309	.451	.451	.451	.451	.451	.451	.451	.451	.451	.451
4	4	-.070	.099	-.101	-.032	-.032	-.108	-.038	-.038	-.038	-.038	-.038	-.038	-.038	-.038	-.038	-.038
5	5	-.007	.000	.018	-.003	-.003	.055	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015
6	6	-.007	.000	.007	-.003	-.003	.055	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015
7	7	-.007	.000	.007	-.003	-.003	.055	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015
8	8	-.007	.000	.007	-.003	-.003	.055	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015
9	9	-.007	.000	.007	-.003	-.003	.055	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015
10	10																

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 158 ALPHA-MCL = 6.0 POP RUN.PT 31.06
 RUN 31 ALPHA-PAR = 2.0 Q-COMP = .31951
 POINT 3 SIGMA = 90. V-REF = 198.21
 COMPUTED FREQUENCY = 15.53, W = .1231

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
N	.012		.562		.148		.261		.392		.530	
1	34.414	15.17	11.265	17.41	7.660	18.72	4.684	19.98	3.211	13.25	2.706	6.83
2	1.565	278.98	17.41	17.41	7.660	18.72	4.684	19.98	3.211	13.25	2.706	6.83
3	1.234	49.60	346	120.41	6.67	224.81	166	204.51	.111	207.39	.219	238.66
4	.382	189.95	.091	47.26	.058	124.77	.041	50.49	.052	319.13	.021	162.15
5	.299	51.97	.051	248.9	.018	73.75	.038	85.55	.030	246.81	.025	179.06
6	.329	342.65	.056	174.91	.015	207.71	.035	288.69	.015	278.33	.027	47.59
7	.176	118.81	.059	97.67	.045	156.67	.024	129.10	.032	144.49	.028	96.23
8	.219	28.35	.029	57.60	.017	37.90	.014	14.28	.019	42.16	.039	93.13
9	.081	3.75	.015	62.50	.014	3.70	.016	309.46	.007	89.90	.039	310.13
10	.113	339.53	.042	307.26	.027	330.96	.010	331.61	.014	328.64	.039	345.49

X	N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	N	CM-MAG	PHIN	N	CM-MAG	PHIM
1	1	182	349.32	7.32	330.74	357	331.01	1	4	305	122	1.203	19.40
2	2	152	325.00	7.32	329.74	182	189.72	2	3	123	34	.058	272.62
3	3	.053	163.07	.046	199.78	.003	75.70	3	4	.015	92	.006	161.89
4	4	.016	183.97	.007	140.53	.006	38.46	4	5	.009	31	.005	22.15
5	5	.015	139.94	.012	140.53	.005	17.99	5	6	.013	314	.005	309.20
6	6	.007	187.26	.012	151.68	.004	244.10	6	7	.021	128	.005	110.25
7	7	.015	127.19	.012	151.68	.016	120.92	7	8	.019	156	.005	113.37
8	8	.010	271.68	.012	122.01	.005	127.54	8	9	.009	331	.005	325.46
9	9	.006	133.49	.005	127.54	.005	127.54	9	10	.013	331		
10	10							10					

*** STABILITY PARAMETER

* XI = -.3991
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*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
			.125		.125		.125		.500		.125	
1	2.344	71.86	2.344	71.86	3.648	21.53	11.997	128.34	1.935	162.18	7.858	278.51
2	.358	214.33	.358	214.33	.806	207.09	1.483	302.91	.174	237.96	.667	143.92
3	.071	221.00	.071	221.00	.112	39.38	.903	195.91	.019	308.95	.515	112.42
4	.052	239.94	.052	239.94	.106	162.44	.547	304.38	.046	326.09	.257	343.22
5	.121	234.64	.121	234.64	.130	162.44	.130	213.90	.061	179.04	.144	279.71
6	.009	359.26	.009	359.26	.035	306.89	.140	344.33	.012	307.59	.023	133.21
7	.011	127.63	.011	127.63	.018	330.45	.057	14.86	.013	307.69	.075	282.90
8	.009	213.83	.009	213.83	.018	330.45	.041	189.06	.021	293.21	.049	270.49
9	.016	235.83	.016	235.83	.029	295.27	.026	268.04	.012	289.78	.020	270.49
10	.014	20.43	.014	20.43	.005	87.96	.080	146.82	.011	144.17	.031	106.07

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 100 ALPHA-MCL = 6.0 P/P RUMPT 31.68
QUY 11 ALPHA-CAR = 2.0 C-COMP = 37.68
POINT 5 SIGMA = 9.0 V-REF = 207.49
COMPUTED FREQUENCY = 17.19, K = 15.74

FOURIER COEFFICIENTS, REAL & IMAGINARY
** BLADE PRESSURES, PER RADIAN **

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	2	-2.376	-5.656	-6.232	-0.257	-0.057	-1.888	-1.481
2	3	-2.171	-1.948	-2.491	-0.257	-0.057	-1.888	-1.481
3	4	-1.195	-1.195	-1.195	-0.257	-0.057	-1.888	-1.481
4	5	-1.195	-1.195	-1.195	-0.257	-0.057	-1.888	-1.481
5	6	-1.195	-1.195	-1.195	-0.257	-0.057	-1.888	-1.481
6	7	-1.195	-1.195	-1.195	-0.257	-0.057	-1.888	-1.481
7	8	-1.195	-1.195	-1.195	-0.257	-0.057	-1.888	-1.481
8	9	-1.195	-1.195	-1.195	-0.257	-0.057	-1.888	-1.481
9	10	-1.195	-1.195	-1.195	-0.257	-0.057	-1.888	-1.481

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	2	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
2	3	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
3	4	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
4	5	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
5	6	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
6	7	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
7	8	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
8	9	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
9	10	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215

X	N	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	2	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
2	3	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
3	4	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
4	5	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
5	6	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
6	7	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
7	8	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
8	9	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215
9	10	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215	-1.215

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[illegible]

OCWT PERIODICITY IFST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 167 ALPHA-MCL = 9.0 POP RUN PT 31.08
RUN 31 ALPHA-PAR = 9.0 Q-COMP = 32.683
POINT 5 SIGMA = 9.0 V-REF = 200.49
COMPUTED FREQUENCY = 19.19, K = .1534
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, PER RADIAN ***

X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
N	012	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	34.620	14.07	11.404	16.63	7.134	18.65	4.129	21.08	3.277	19.13	2.812	9.85	1.821	356.66
2	1.112	251.93	.365	152.92	.245	209.42	.157	189.70	.107	192.12	.067	231.16	.037	183.02
3	2.876	44.08	.069	175.94	.030	182.78	.023	187.20	.013	191.12	.008	231.16	.005	321.45
4	3.772	159.63	.099	175.18	.046	182.54	.042	189.48	.033	191.12	.021	231.16	.008	300.63
5	.250	240.15	.049	240.15	.026	330.65	.042	348.41	.004	293.53	.021	192.12	.008	300.63
6	.197	359.19	.049	102.37	.020	330.71	.042	279.59	.014	323.54	.021	192.12	.008	300.63
7	.124	33.25	.049	337.66	.027	27.18	.042	279.59	.014	323.54	.021	192.12	.008	300.63
8	.045	165.07	.049	195.67	.034	223.54	.042	252.44	.025	233.54	.021	192.12	.009	265.05
9	.063	47.85	.033	232.44	.033	244.80	.032	252.44	.026	242.82	.021	192.12	.004	297.22
10														

X =	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	N	CM-MAG	PHIN	N	CM-MAG	PHIN
1	1.192	359.57	.624	341.24	.389	349.73	.154	349.73	1	1.207	349.73	1	1.207	349.73
2	.077	134.06	.049	173.46	.016	270.97	.016	270.97	2	.005	270.97	2	.005	270.97
3	.077	134.06	.049	173.46	.016	270.97	.016	270.97	3	.005	270.97	3	.005	270.97
4	.077	134.06	.049	173.46	.016	270.97	.016	270.97	4	.005	270.97	4	.005	270.97
5	.077	134.06	.049	173.46	.016	270.97	.016	270.97	5	.005	270.97	5	.005	270.97
6	.077	134.06	.049	173.46	.016	270.97	.016	270.97	6	.005	270.97	6	.005	270.97
7	.077	134.06	.049	173.46	.016	270.97	.016	270.97	7	.005	270.97	7	.005	270.97
8	.077	134.06	.049	173.46	.016	270.97	.016	270.97	8	.005	270.97	8	.005	270.97
9	.077	134.06	.049	173.46	.016	270.97	.016	270.97	9	.005	270.97	9	.005	270.97
10	.077	134.06	.049	173.46	.016	270.97	.016	270.97	10	.005	270.97	10	.005	270.97

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	LAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.779	73.45	2.743	17.93	2.743	17.93	2.743	17.93	2.743	17.93	2.743	17.93	2.743	17.93
2	.133	174.27	.055	223.42	.055	223.42	.055	223.42	.055	223.42	.055	223.42	.055	223.42
3	.083	266.78	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26
4	.083	266.78	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26
5	.083	266.78	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26
6	.083	266.78	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26
7	.083	266.78	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26
8	.083	266.78	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26
9	.083	266.78	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26
10	.083	266.78	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26	.076	261.26

*** XI = -.3793 ***

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 174 ALPHA-MCL = 6.0 PDP RUN-PT 34-01
RUN 34 ALPHA-PAR = 2.0 O-CORR = 33049
POINT 1 ALPHA-SIGMA = 135. V-REF = 201.61
COMPUTED FREQUENCY = 9.10, K = .0709

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	25	594	-2.697	168	-2.710	168	-2.710	168	-2.710	168	-2.710
2	3	057	-1.845	237	-2.280	237	-2.280	237	-2.280	237	-2.280
3	4	346	-1.300	304	-2.280	304	-2.280	304	-2.280	304	-2.280
4	5	449	-1.161	300	-2.280	300	-2.280	300	-2.280	300	-2.280
5	6	161	-1.092	103	-1.103	103	-1.103	103	-1.103	103	-1.103
6	7	092	-1.018	033	-1.033	033	-1.033	033	-1.033	033	-1.033
7	8	008	-1.008	031	-1.031	031	-1.031	031	-1.031	031	-1.031
8	9	004	-1.004	031	-1.031	031	-1.031	031	-1.031	031	-1.031
9	10	144	-1.144	031	-1.031	031	-1.031	031	-1.031	031	-1.031

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	25	150	-1.150	150	-1.150	150	-1.150	150	-1.150	150	-1.150
2	3	138	-1.138	138	-1.138	138	-1.138	138	-1.138	138	-1.138
3	4	025	-1.025	025	-1.025	025	-1.025	025	-1.025	025	-1.025
4	5	025	-1.025	025	-1.025	025	-1.025	025	-1.025	025	-1.025
5	6	019	-1.019	019	-1.019	019	-1.019	019	-1.019	019	-1.019
6	7	002	-1.002	002	-1.002	002	-1.002	002	-1.002	002	-1.002
7	8	002	-1.002	002	-1.002	002	-1.002	002	-1.002	002	-1.002
8	9	002	-1.002	002	-1.002	002	-1.002	002	-1.002	002	-1.002
9	10	002	-1.002	002	-1.002	002	-1.002	002	-1.002	002	-1.002

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	25	334	-2.334	334	-2.334	334	-2.334	334	-2.334	334	-2.334
2	3	212	-2.212	212	-2.212	212	-2.212	212	-2.212	212	-2.212
3	4	056	-2.056	056	-2.056	056	-2.056	056	-2.056	056	-2.056
4	5	001	-2.001	001	-2.001	001	-2.001	001	-2.001	001	-2.001
5	6	001	-2.001	001	-2.001	001	-2.001	001	-2.001	001	-2.001
6	7	001	-2.001	001	-2.001	001	-2.001	001	-2.001	001	-2.001
7	8	001	-2.001	001	-2.001	001	-2.001	001	-2.001	001	-2.001
8	9	001	-2.001	001	-2.001	001	-2.001	001	-2.001	001	-2.001
9	10	001	-2.001	001	-2.001	001	-2.001	001	-2.001	001	-2.001

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCW PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 174 ALPHA-MCL = 6.0 POP RUN-PT 34.01
RUN 34 ALPHA-BAR = 2.0 Q-COMP = 33049
POINT 1 SIGMA = 135. V-REF = 201.61
COMPUTED FREQUENCY = 9.10, K = .0709
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	25	.734	185.99	6.716	182.39	.017	180.29	2.871	176.74	2.888	171.03	2.907	165.87	2.735	162.07
2	33	.376	205.56	.327	220.39	.481	290.51	.534	286.96	.557	282.03	.458	213.06	.466	205.07
3	4	.572	213.70	.305	213.37	.373	210.34	.339	214.39	.322	208.98	.325	211.07	.317	211.09
4	5	.540	213.70	.099	213.01	.150	177.107	.176	183.16	.246	174.98	.264	173.20	.255	173.72
5	6	.094	169.89	.177	138.05	.081	308.107	.080	183.16	.063	169.13	.076	173.20	.068	173.72
6	7	.359	126.83	.109	138.05	.041	164.725	.058	166.80	.033	159.52	.030	126.84	.030	119.96
7	8	.184	166.19	.044	250.83	.054	147.725	.048	167.50	.038	159.52	.020	166.82	.036	173.72
8	9	.148	166.19	.020	250.83	.010	197.458	.023	154.87	.019	254.95	.012	247.12	.012	239.68
9	10							.010	154.87	.019	254.95				

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	.287	187.59	1.858	169.67	1.665	169.67	9.533	9.81	5.754	13.38	3.791	17.33	2.569	24.42
2	3	.308	211.91	.308	213.63	.327	212.33	1.814	167.39	.529	158.07	.475	202.80	.434	208.87
3	4	.055	177.09	.063	183.90	.064	185.13	.203	83.46	.347	67.03	.240	199.80	.244	195.48
4	5	.025	338.73	.081	334.66	.058	331.80	.082	182.47	.391	205.54	.062	182.47	.068	189.07
5	6	.015	175.98	.032	117.71	.034	121.80	.049	135.68	.029	170.20	.038	190.84	.013	177.35
6	7	.018	250.99	.017	270.44	.045	184.725	.071	162.23	.065	183.18	.053	189.56	.047	201.61
7	8	.008	250.99	.007	270.44	.006	247.253	.035	131.93	.021	148.88	.021	159.38	.014	173.28
8	9							.016	126.11	.006	32.12				
9	10														

X	N	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI	CP-MAG	UPPER PHI
1	2	.497	27.00	1.222	33.84	.593	58.97	.450	97.16	.407	189.77	.820	153.94	.620	153.94
2	3	.246	270.50	.301	215.41	.228	227.68	.513	283.93	.660	198.27	.620	153.94	.259	153.94
3	4	.056	186.60	.077	179.58	.064	186.60	.357	209.93	.216	194.52	.259	153.94	.259	153.94
4	5	.017	193.09	.020	193.09	.034	120.90	.062	186.60	.070	130.86	.061	186.60	.061	186.60
5	6	.012	192.53	.016	202.54	.041	185.38	.045	186.60	.038	204.86	.048	186.60	.048	186.60
6	7	.007	46.60	.006	50.04	.006	114.48	.003	67.54	.001	41.25	.003	124.25	.003	124.25
7	8														
8	9														
9	10														

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTEF BLADE DATA, WALL STATIONS

FILE 174 ALPHA-WCL = 6.0 PDP RUN-PT 34.01
RUN 34 ALPHA-PAR = 2.0 Q-COMP = 330.9
POINT 1 SIGMA = 135. V-REF = 201.61
COMPUTED FREQUENCY = 9.13, K = .0709

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.062		.148		.261		.392		.530		.661	
	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI
1	34	.987	4	.347	12	.314	7	.636	1	.149	5	.258
2	105	-.189	1	.432	1	.163	1	.080	1	.125	3	.985
3	.677	1.885	1	.435	1	.211	1	.080	1	.051	1	.778
4	.323	1.658	1	.041	1	.254	1	.080	1	.023	1	.066
5	.367	.296	1	.013	1	.009	1	.080	1	.017	1	.008
6	.260	-.135	1	.132	1	.009	1	.080	1	.019	1	.008
7	.100	-.066	1	.132	1	.033	1	.080	1	.037	1	.008
8	.145	-.029	1	.035	1	.009	1	.080	1	.015	1	.008
9	-.032	-.200	1	.054	1	.016	1	.080	1	.024	1	.003
10	.158	-.028	1	.022	1	.008	1	.080	1	.008	1	.003

X =	.860		.910		.910		.910		.910		.910	
	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI
1	2	.102	1	.353	1	.151	1	.353	1	.151	1	.353
2	.018	-.064	1	.027	1	.040	1	.027	1	.040	1	.027
3	.047	-.017	1	.040	1	.040	1	.040	1	.040	1	.040
4	.019	.055	1	.040	1	.040	1	.040	1	.040	1	.040
5	.005	-.022	1	.040	1	.040	1	.040	1	.040	1	.040
6	.003	.001	1	.040	1	.040	1	.040	1	.040	1	.040
7	.010	-.001	1	.040	1	.040	1	.040	1	.040	1	.040
8	.009	.006	1	.040	1	.040	1	.040	1	.040	1	.040
9	.009	.011	1	.040	1	.040	1	.040	1	.040	1	.040
10	.000	.011	1	.040	1	.040	1	.040	1	.040	1	.040

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	.125		.000		.125		.125		.125		.125	
	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG
1	2	.169	1	.321	1	.169	1	.321	1	.169	1	.321
2	.169	-.278	1	.321	1	.169	1	.321	1	.169	1	.321
3	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
4	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
5	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
6	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
7	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
8	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
9	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
10	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321

*** STABILITY PARAMETER

WALL NO.	.125		.000		.125		.125		.125		.125	
	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG	N	CPREAL CPIMAG
1	2	.169	1	.321	1	.169	1	.321	1	.169	1	.321
2	.169	-.278	1	.321	1	.169	1	.321	1	.169	1	.321
3	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
4	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
5	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
6	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
7	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
8	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
9	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321
10	.217	-.217	1	.321	1	.169	1	.321	1	.169	1	.321

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 174 ALPHA-MCL = 6.0 PDP RUN,PT 34.01
UN 34 ALPHA-RAR = 2.0 Q-COMP = 33089
JOINT 1 SIGMA = 135. V-REF = 201.61
COMPUTED FREQUENCY = 9.10. K = .0709

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	35.251	7.02	12.416	7.35	7.722	8.56	5.214	8.39	3.994	3.72	3.834	359.57
2	1.933	27.14	48.7	115.85	145	188.45	147	148.16	164	112.40	2.927	353.45
3	4.133	27.14	25.7	81.70	197	182.40	148	152.23	146	125.72	119	357.86
4	4.732	116.88	61.3	93.67	132	166.16	149	157.82	147	130.78	119	357.86
5	2.93	332.54	132	255.89	136	166.16	150	157.82	147	130.78	119	357.86
6	1.20	326.75	136	255.89	136	166.16	150	157.82	147	130.78	119	357.86
7	1.24	296.49	136	255.89	136	166.16	150	157.82	147	130.78	119	357.86
8	2.12	98.61	136	255.89	136	166.16	150	157.82	147	130.78	119	357.86
9	1.60	349.79	136	255.89	136	166.16	150	157.82	147	130.78	119	357.86
10			136	255.89	136	166.16	150	157.82	147	130.78	119	357.86

N	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.123	352.04	1.508	333.79	856	347.15	5.145	4.04	1.145	225.23	1.213	10.16
2	1.666	254.40	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23
3	1.666	199.40	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23
4	1.666	170.80	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23
5	1.666	170.80	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23
6	1.666	170.80	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23
7	1.666	170.80	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23
8	1.666	170.80	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23
9	1.666	170.80	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23
10	1.666	170.80	1.191	321.86	304	192.19	1.145	225.23	1.145	225.23	1.145	225.23

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.077	39.48	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
2	4.13	294.23	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
3	3.81	223.10	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
4	3.18	132.99	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
5	3.075	217.07	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
6	3.075	217.07	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
7	3.075	217.07	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
8	3.075	217.07	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
9	3.075	217.07	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI
10	3.075	217.07	3.015	11.92	12.865	183.86	2.563	173.23	8.350	322.60	1.125	PHI

*** STABILITY PARAMETER

* XI = -.2141 *
* * *

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS
FILE 176 ALPHA-MCL = 6.0 PDP RUN-PT 34.03
RUN 34 ALPHA-BAR = 2.0 Q-COMP = 33064
POINT 33 SIGMA = 135. V-PREF = 201.66
COMPUTED FREQUENCY = 15.49, K = .1207
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	25	-.424	-.610	-.411	-.214	-.263	-.273	-.293
2	3	-.020	-.568	-.189	-.133	-.048	-.054	-.043
3	3	-.676	-.908	-.041	-.033	-.001	-.084	-.081
4	5	-.310	-.626	-.216	-.013	-.032	-.027	-.027
5	6	-.024	-.343	-.095	-.071	-.005	-.043	-.010
6	7	-.024	-.517	-.066	-.012	-.008	-.015	-.015
7	6	-.128	-.361	-.021	-.005	-.037	-.019	-.016
8	6	-.061	-.26	-.016	-.011	-.012	-.014	-.014
9	10	-.026	-.143	-.027	-.036	-.001	-.031	-.001
X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	2	-.074	-.494	-.111	-.395	-.614	-.656	-.412
2	3	-.037	-.259	-.033	-.250	-.057	-.099	-.068
3	4	-.080	-.053	-.039	-.064	-.154	-.132	-.103
4	5	-.043	-.099	-.066	-.002	-.007	-.054	-.044
5	6	-.017	-.023	-.017	-.027	-.003	-.023	-.005
6	7	-.017	-.011	-.016	-.025	-.021	-.038	-.012
7	8	-.015	-.011	-.011	-.041	-.017	-.015	-.014
8	9	-.002	-.005	-.005	-.005	-.010	-.005	-.007
9	10	-.002	-.003	-.002	-.018	-.010	-.005	-.007
X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG	
1	1	-.365	-.762	-.341	-.043	-.006	-.600	
2	3	-.060	-.262	-.077	-.063	-.007	-.244	
3	4	-.090	-.071	-.165	-.021	-.032	-.104	
4	5	-.024	-.079	-.041	-.076	-.046	-.047	
5	6	-.001	-.059	-.083	-.025	-.031	-.034	
6	7	-.013	-.003	-.010	-.008	-.006	-.004	
7	8	-.011	-.013	-.009	-.011	-.008	-.019	
8	9	-.003	-.002	-.011	-.004	-.007	-.010	
9	10	-.002	-.004	-.003	-.001	-.001	-.004	

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 176 ALPHA-MCL = 6.0 PDP RUNPT 34.03
RUN 34 ALPHA-BAR = 2.0 Q-COMP = 33064
POINT 3 SIGMA = 135. V-REF = 201.66
COMPUTED FREQUENCY = 15.49, K = .1207
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	.558	185.86	6.714	193.51	3.969	183.10	2.788	181.45	2.907	176.47	2.767	170.76
2	3	.369	193.87	.191	198.68	.133	193.41	.096	190.81	.134	191.80	.264	191.71
3	4	.659	288.07	.094	25.83	.638	60.51	.059	37.62	.143	29.67	.297	29.75
4	5	.462	227.92	.216	91.39	.084	28.18	.071	72.46	.134	80.61	.108	75.68
5	6	.282	94.87	.074	235.02	.084	295.22	.036	269.41	.089	298.16	.045	300.70
6	7	.184	214.11	.048	14.11	.014	60.38	.029	109.20	.049	95.65	.030	109.46
7	8	.145	551.95	.016	79.26	.005	88.23	.005	117.73	.018	329.83	.026	115.77
8	9	.102	307.95	.013	301.06	.018	223.54	.017	46.82	.013	338.42	.019	332.16
9	10	.146	100.42	.029	69.74	.036	82.85	.011	319.90	.013	87.90	.015	88.89
10								.037	90.32			.027	88.89

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	.132	166.59	1.721	167.27	1.449	166.87	9.539	9.96	5.798	14.32	3.854	18.45
2	3	.096	33.80	.096	28.40	.092	25.31	.250	2.62	.028	78.26	.132	5.26
3	4	.105	71.91	.110	66.83	.108	65.00	.067	34.56	.159	14.24	.063	49.42
4	5	.077	303.26	.079	304.34	.074	302.35	.053	267.08	.076	264.81	.060	292.37
5	6	.025	115.11	.020	121.59	.020	102.71	.025	215.57	.005	357.33	.008	181.92
6	7	.020	32.79	.019	32.71	.016	22.56	.048	358.57	.021	358.69	.013	57.74
7	8	.017	350.44	.013	335.88	.014	341.87	.018	164.52	.032	168.49	.028	194.46
8	9	.021	95.03	.018	99.04	.021	94.97	.021	211.85	.010	170.49	.035	151.26
9	10												

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	.569	222.18	1.287	132.55	.648	58.23	.489	95.08	.612	171.43	.337	144.47
2	3	.090	66.94	.111	359.69	.165	356.20	.033	39.20	.036	85.98	.336	136.53
3	4	.064	292.09	.105	59.03	.115	56.14	.152	60.03	.039	28.02	.110	17.22
4	5	.009	995.23	.068	296.21	.102	305.48	.061	293.67	.038	296.87	.120	297.79
5	6	.017	349.23	.015	342.68	.011	306.57	.020	65.89	.018	123.05	.019	291.82
6	7	.004	317.25	.016	340.94	.009	350.73	.018	17.56	.008	15.02	.010	335.02
7	8	.008	106.58	.005	328.80	.006	343.87	.004	397.81	.008	339.64	.009	335.02
8	9			.014	104.30	.018	98.81	.019	93.51	.019	92.94	.019	90.62
9	10												

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 176 ALPHA-MCL = 6.0 PDP RUN.PT 34.03
RUN 34 ALPHA-BAR = 2.0 Q-COMP = 33064
POINT 3 SIGMA = 135. V-REF = 201.66
COMPUTED FREQUENCY = 15.49, K = .1207

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X = .012		.062		.148		.261		.392		.530		.661	
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
2	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
3	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
4	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
5	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
6	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
7	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
8	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
9	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
10	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073

X = .774		.860		.910		.910		.910		.910		.910	
N	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI	DELCPR DELCPI
1	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
2	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
3	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
4	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
5	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
6	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
7	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
8	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
9	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073
10	2.031	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073	1.073

*** STABILITY PARAMETER

* XI = -.2132 *

*** WALL PRESSURES, PER RADIAN ***

WALL NO.		W1		W2		W4		W6		W10	
GAP FRACTION	N	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG	CPREAL CPIMAG
1	1	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
2	2	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
3	3	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
4	4	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
5	5	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
6	6	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
7	7	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
8	8	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
9	9	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591
10	10	1.536	1.407	3.144	547	13.034	828	2.465	107	7.059	-5.591

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- CENTER PERIODICITY TEST
-- CENTER BLADE DATA, WALL STATIONS

FILE 176 ALPHA-WCL = 6.0 PDP RUN-PT 34.03
RUN 34 ALPHA-BAR = 2.0 Q-COMP = 33064
POINT 3 SIGMA = 135 V-REF = 207.66
COMPUTED FREQUENCY = 15.49, K = .1207
AND PHASE ANGLE

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	N	.012		.062		.148		.261		.392		.530		.661	
		DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	35	.074	6.97	12.456	8.51	7.751	10.66	5.317	12.08	4.413	8.63	3.791	4.80	2.835	359.18
2	34	.032	280.18	.235	243.80	.146	127.16	.203	124.33	.137	95.08	.056	111.04	.015	356.81
3	4	.032	133.19	.235	243.80	.146	127.16	.203	124.33	.137	95.08	.056	111.04	.015	356.81
4	623	.023	102.28	.063	312.01	.024	122.24	.058	35.39	.061	300.49	.031	299.01	.037	319.86
5	300	.269	37.37	.076	117.91	.019	122.31	.044	28.24	.040	139.52	.018	137.83	.027	322.72
6	7	.204	29.85	.068	119.24	.014	342.43	.015	282.03	.025	194.76	.014	316.13	.014	271.52
7	6	.155	350.04	.018	40.47	.033	87.19	.013	375.29	.020	193.07	.015	245.13	.015	241.63
8	9	.116	132.47	.022	141.36	.019	125.62	.013	149.11	.016	165.37	.010	116.44	.011	142.90
9	10	.154	273.17	.032	232.36	.035	252.13	.031	256.72	.015	257.49	.014	252.87	.006	238.26

X =	N	.774		.860		.910		N		CN-MAG		PHIN		N		CN-MAG		PHIM	
		DELCPM	PHI	DELCPM	PHI	DELCPM	PHI												
1	2	.031	359.71	1.111	344.36	.817	6.94	1	5	.117	7.34	1.17	7.34	1	3	1.217	10.09	1.016	10.97
2	3	.033	218.94	.060	266.63	.222	385.27	2	3	.128	14.15	.133	14.15	2	3	.069	308.91	.069	308.91
3	4	.053	37.76	.019	277.44	.013	85.74	3	4	.021	20.35	.021	20.35	3	4	.010	59.18	.010	59.18
4	5	.020	156.26	.015	161.40	.007	200.92	4	5	.021	20.35	.021	20.35	4	5	.004	40.42	.004	40.42
5	6	.020	345.82	.009	248.62	.008	270.74	5	6	.021	254.44	.021	254.44	5	6	.002	42.57	.002	42.57
6	7	.010	231.37	.013	249.09	.009	286.03	6	7	.012	254.44	.012	254.44	6	7	.002	20.14	.002	20.14
7	8	.008	103.48	.011	182.78	.005	176.52	7	8	.015	146.12	.015	146.12	7	8	.003	130.04	.003	130.04
8	9	.012	157.99	.005	149.51	.005	308.14	8	9	.019	257.36	.019	257.36	8	9	.005	257.42	.005	257.42
9	10	.003	285.46	.002	336.15	.003	308.14	9	10					9	10				

*** STABILITY PARAMETER

*** WALL PRESSURES, PER RADIAN ***

WALL NO. GAP FRACTION	N	.125		.000		.125		.125		.500		.125		.125		.125		.125		.125	
		CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	.083	42.49	3.191	9.87	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26
2	3	.054	116.84	.418	131.04	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26
3	4	.153	46.92	.195	29.04	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26
4	5	.093	123.93	.101	57.21	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26
5	6	.040	355.86	.095	281.15	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26
6	7	.027	107.43	.013	220.02	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26
7	8	.044	117.52	.030	349.78	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26
8	9	.005	300.64	.024	182.16	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26
9	10	.038	195.16	.013	101.65	1.692	183.64	2.468	177.52	9.005	121.62	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26	1.015	169.26

*** XI = -.2132 ***

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 178 ALPHA-MCL = 6.0 PDP RUN-PT 34.05
RUN 34 ALPHA-EAR = 2.0 0-COMP = 33077
POINT 5 SIGMA = 135. V-REF = 201.71
COMPUTED FREQUENCY = 19.09, K = .1487

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIAN ***

X	N	.012-UPPER CPREAL CPIMAG	.062-UPPER CPREAL CPIMAG	.148-UPPER CPREAL CPIMAG	.261-UPPER CPREAL CPIMAG	.392-UPPER CPREAL CPIMAG	.530-UPPER CPREAL CPIMAG	.661-UPPER CPREAL CPIMAG
1	25	-.415	-2.261	-.340	-.320	-2.509	-2.648	-2.390
2	2	-.068	-.424	-.013	-.154	-.186	-.198	-.178
3	3	-.357	-.704	-.082	-.045	-.106	-.018	-.014
4	5	-.418	-.704	-.132	-.002	-.002	-.036	-.020
5	6	-.058	-.172	-.049	-.033	-.027	-.037	-.001
6	7	-.119	-.098	-.031	-.028	-.026	-.005	-.003
7	8	-.021	-.138	-.032	-.005	-.003	-.005	-.001
8	9	-.042	-.023	-.024	-.014	-.009	-.002	-.010
9	10							

X	N	.774-UPPER CPREAL CPIMAG	.860-UPPER CPREAL CPIMAG	.910-UPPER CPREAL CPIMAG	.012-LOWER CPREAL CPIMAG	.062-LOWER CPREAL CPIMAG	.148-LOWER CPREAL CPIMAG	.261-LOWER CPREAL CPIMAG
1	1	-.970	-.473	-.316	-.639	-.904	3.737	2.516
2	2	-.152	-.051	-.002	-.066	-.147	-.027	-.012
3	3	-.026	-.055	-.032	-.122	-.000	-.009	-.045
4	5	-.001	-.022	-.003	-.007	-.016	-.005	-.001
5	6	-.004	-.003	-.001	-.024	-.017	-.002	-.001
6	7	-.008	-.002	-.006	-.002	-.005	-.010	-.029
7	8	-.009	-.002	-.006	-.005	-.002	-.015	-.004
8	9	-.000	-.012	-.002	-.005	-.001	-.015	-.017
9	10							

X	N	.392-LOWER CPREAL CPIMAG	.530-LOWER CPREAL CPIMAG	.661-LOWER CPREAL CPIMAG	.774-LOWER CPREAL CPIMAG	.860-LOWER CPREAL CPIMAG	.910-LOWER CPREAL CPIMAG
1	1	1.435	1.118	.418	.031	.585	.456
2	2	-.064	-.028	-.070	-.128	-.137	-.292
3	3	-.029	-.030	-.020	-.055	-.038	-.018
4	5	-.005	-.014	-.009	-.011	-.008	-.002
5	6	-.005	-.013	-.016	-.022	-.015	-.006
6	7	-.002	-.032	-.006	-.001	-.001	-.012
7	8	-.004	-.003	-.006	-.002	-.001	-.004
8	9	-.007	-.005	-.005	-.002	-.001	-.003
9	10						

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 178 ALPHA-MCL = 6.0 POP RUN-PT 34.75
HUN 34 ALPHA-PR = 2.0 Q-COMP = 330.79
POINT 2 SURFA = 135.0 V-REF = 251.71
COMPUTED FREQUENCY = 19.09, K = .1487
FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	25	515	185.08	6.629	192.24	3.925	132.95	2.731	181.99	2.513	177.16	2.679	171.22	2.456	166.66
2	274	104.358	163.57	203	163.57	215	228.32	259	233.64	290	229.96	267	209.16	208	211.37
3	792	187.39	112.88	089	112.88	094	146.02	075	126.86	129	144.77	064	105.88	062	103.31
4	456	206.06	158.44	155	158.44	038	269.02	012	101.86	105	88.56	075	193.91	064	106.50
5	181	108.61	197.03	084	197.03	022	269.02	040	107.45	009	275.93	025	283.91	026	273.43
6	7	121.49	354.81	039	354.81	006	81.21	024	82.95	043	50.40	022	71.05	026	66.87
7	207	122.13	111.61	034	111.61	007	201.83	028	179.07	029	191.99	030	239.49	007	331.74
8	139	261.22	253.28	026	253.28	007	123.85	017	107.39	014	101.67	010	128.15	012	131.85
9	646	151.60	329.94	036	329.94	021	355.22	012	264.09	021	294.00	016	275.59	013	324.95
10				036	329.94	012	355.22	016	33.54	020	356.99	017	9.95	014	88.83

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	026	166.51	1.620	166.51	1.361	165.23	9.791	10.09	6.386	14.04	4.020	19.60	2.778	25.11
2	026	166.51	166.51	051	96.95	046	124.70	1.202	280.02	239	89.90	029	222.34	012	208.51
3	061	103.34	120.64	051	96.95	046	124.70	1.202	280.02	239	89.90	029	222.34	012	208.51
4	015	273.70	268.69	015	268.69	013	257.95	122	175.86	024	129.26	024	147.90	055	145.03
5	005	143.39	90.97	025	90.97	020	85.88	065	83.06	017	105.69	026	89.70	014	95.11
6	005	143.39	1.19	025	90.97	020	85.88	065	83.06	017	105.69	026	89.70	014	95.11
7	009	166.75	150.47	011	150.47	009	152.07	032	94.51	029	105.69	026	89.70	014	95.11
8	009	166.75	346.24	011	150.47	009	152.07	032	94.51	029	105.69	026	89.70	014	95.11
9	012	90.06	167.43	011	150.47	009	152.07	032	94.51	029	105.69	026	89.70	014	95.11
10				011	150.47	009	152.07	032	94.51	029	105.69	026	89.70	014	95.11

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1.690	31.89	39.33	1.445	39.33	019	59.33	019	87.11	056	153.07	008	131.53	008	131.53
2	021	42.17	3.43	022	3.43	074	341.06	071	217.84	258	140.07	032	195.31	032	195.31
3	006	118.19	157.53	020	157.53	034	126.80	056	140.07	043	159.27	040	162.31	040	162.31
4	007	46.46	15.89	014	15.89	026	290.19	012	137.14	009	159.27	008	121.49	008	121.49
5	030	121.46	135.57	046	135.57	032	207.67	032	131.26	001	136.51	008	277.91	008	277.91
6	004	255.97	175.03	003	175.03	006	197.06	002	151.41	001	136.51	008	144.37	008	144.37
7	011	196.72	160.76	011	160.76	014	68.46	003	190.07	001	219.26	001	89.86	001	89.86
8	007	196.72	205.70	009	205.70	005	189.46	003	227.13	006	322.35	003	328.64	003	328.64
9				009	205.70	005	189.46	003	227.13	006	322.35	003	328.64	003	328.64
10				009	205.70	005	189.46	003	227.13	006	322.35	003	328.64	003	328.64

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

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FILE 178 ALPHA-MCL = 6.0 POP RUN.PI 34.05
      34 ALPHA-BAR = 2.0 Q-COMP = .33079
      5 SIGMA = 135. V-DEF = 201.71
POINT COMPUTED FREQUENCY = 19.09, K = .1487

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FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND
COMPUTED Y

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	.012		.062		.148		.261		.392		.530		.661		
	N	DELCP	N	DELCP	N	DELCP	N	DELCP	N	DELCP	N	DELCP	N	DELCP	
1	35	.054	3	.977	12	.524	1	.817	5	.245	1	.274	3	.944	507
2	35	.077	3	.449	12	.056	1	.437	5	.025	1	.060	3	.053	507
3	35	.765	3	.316	12	.035	1	.083	5	.057	1	.060	3	.045	507
4	35	.426	3	.711	12	.060	1	.157	5	.057	1	.030	3	.034	507
5	35	.093	3	.426	12	.064	1	.044	5	.034	1	.033	3	.019	507
6	35	.114	3	.130	12	.016	1	.050	5	.022	1	.029	3	.018	507
7	35	.117	3	.185	12	.007	1	.003	5	.001	1	.030	3	.007	507
8	35	.048	3	.162	12	.009	1	.042	5	.004	1	.020	3	.005	507
9	35	.048	3	.023	12	.002	1	.006	5	.009	1	.015	3	.005	507
10	35	.048	3	.023	12	.002	1	.006	5	.009	1	.015	3	.005	507

X	.774		.860		.910		N	CNREAL		CNIMAG		N	CMREAL		CMIMAG	
	DELCP	DELCP	DELCP	DELCP	DELCP	DELCP		DELCP	DELCP	DELCP	DELCP		DELCP	DELCP	DELCP	DELCP
1	2.0014	145	997	-.079	-.050	167	5.190	-.779	1.243	-.205	1	1.243	-.205	1	1.243	-.205
2	-.0414	128	-.032	-.077	-.028	157	-.030	-.075	1.062	-.028	2	1.062	-.028	2	1.062	-.028
3	-.0088	93	-.008	-.033	-.005	102	-.044	-.024	-.044	-.024	3	-.044	-.024	3	-.044	-.024
4	-.0027	60	-.008	-.018	-.001	77	-.011	-.021	-.011	-.021	4	-.011	-.021	4	-.011	-.021
5	-.013	29	-.001	-.026	-.019	18	-.009	-.030	-.009	-.030	5	-.009	-.030	5	-.009	-.030
6	-.0068	19	-.021	-.014	-.019	67	-.036	-.017	-.036	-.017	6	-.036	-.017	6	-.036	-.017
7	-.0077	9	-.029	-.006	-.006	33	-.012	-.008	-.012	-.008	7	-.012	-.008	7	-.012	-.008
8	-.0091	2	-.002	-.019	-.007	14	-.013	-.008	-.013	-.008	8	-.013	-.008	8	-.013	-.008
9	-.002	1	-.002	-.019	-.007	14	-.013	-.008	-.013	-.008	9	-.013	-.008	9	-.013	-.008
10	-.002	1	-.002	-.019	-.007	14	-.013	-.008	-.013	-.008	10	-.013	-.008	10	-.013	-.008

*** STABILITY PARAMETER

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WALL NO.----- W1      W2      W3      W4      W6      W10
GAP FRACTION N CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG
          -0.125    .000    .125    .125    .500    1.125
***** XI = -.2046 *****

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*** WALL PRESSURES. PER RADIAN ***

WALL NO. 1
GAP FRACTION

521-125
1M
500
2M
125
4M

W6
1.125
W10

XI = -0.2046

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
-- CENTER BLADE DATA, WALL STATIONS

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FILE      178  ALPHA-MCL = 6.0  POP RUN.PT  34.05
              34  ALPHA-PAR = 2.0  C-COMP    .33079
              5    SIGMA = 135.  V-REF      .291.71
POINT      COMPUTED FREQUENCY = 19.09, K = .1487

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FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***
COMPUTED FREQUENCY = 19.09, K =

*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	.012		.062		.148		.261		.392		.530		.661	
	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
1	35.279	6.47	12.655	8.25	7.862	11.38	5.398	13.65	4.418	11.02	3.830	7.67	2.811	2.81
2	31.775	26.04	12.431	277.48	7.119	56.09	141.083	79.17	1356	11.56	0.04	18.95	1.46	57.00
3	1.779	8.80	161.137	277.48	119.104	314.29	083.153	313.17	1356	11.56	0.04	18.95	1.46	57.00
4	863	124.31	137.8	34.26	104.047	154.43	045.153	153.16	1356	11.56	0.04	18.95	1.46	57.00
5	863	32.79	137.8	34.26	104.047	154.43	045.153	153.16	1356	11.56	0.04	18.95	1.46	57.00
6	191	295.09	055.145	72.37	042.006	89.90	029.318	265.01	036	104.13	019	228.67	032	138.58
7	174	48.09	055.145	72.37	042.006	89.90	029.318	265.01	036	104.13	019	228.67	032	138.58
8	217	301.61	043.278	81.1	012.042	112.12	020.257	192.78	036	104.13	019	228.67	032	138.58
9	163	84.34	043.278	81.1	012.042	112.12	020.257	192.78	036	104.13	019	228.67	032	138.58
10	053	334.34	010.142	89	057.027	166.55	031.205	205.49	037	181.68	026	195.41	016	104.92

X	73°		86°		91°		N	CM-MAG		PHIN
	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI		CM-MAG	PHIN	
1	2.007	4.15	.994	375.42	.876	11.05	1	1.230	9.57	
2	.030	248.97	.115	192.27	.140	155.95	2	.001	293.77	
3	.644	186.38	.034	192.25	.006	333.41	3	.001	146.15	
4	.038	116.58	.019	113.96	.009	89.16	4	.012	31.41	
5	.021	128.52	.025	170.13	.019	283.35	5	.001	54.77	
6	.029	145.62	.026	145.83	.020	163.99	6	.005	279.25	
7	.007	324.31	.014	324.62	.009	333.99	7	.006	147.60	
8	.014	290.99	.014	291.82	.007	297.21	8	.002	147.60	
9	.014	262.94	.030	291.82	.016	297.21	9	.002	147.60	
10							10			

*** STABILITY PARAMETER

*** NATON K7J 6C3HUC3NJ 77WN ***

[illegible]

ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 180 ALPHA-MCL = 6.0 PDP RUNPT 35.01
RUN 35 ALPHA-RAR = 2.0 Q-COMP = 32482
POINT 1 SIGMA = 180. V-REF = 199.36
COMPUTED FREQUENCY = 9.07 K = .0713

FOURIER COEFFICIENTS, REAL & IMAGINARY
** BLADE PRESSURES, PER RADIAN **

X	N	012-UPPER CPREAL	012-UPPER CPIMAG	062-UPPER CPREAL	062-UPPER CPIMAG	148-UPPER CPREAL	148-UPPER CPIMAG	261-UPPER CPREAL	261-UPPER CPIMAG	392-UPPER CPREAL	392-UPPER CPIMAG	530-UPPER CPREAL	530-UPPER CPIMAG	661-UPPER CPREAL	661-UPPER CPIMAG
1	26	.600	1.041	-.002	-.002	-.060	-.060	-.249	-.360	-.266	-.401	-.215	-.430	-.269	-.434
2	204	.204	1.855	-.286	-.286	-.050	-.050	-.227	-.097	-.258	-.024	-.117	-.112	-.109	-.093
3	991	-.991	-.650	-.261	-.261	-.039	-.039	-.083	-.195	-.024	-.088	-.043	-.057	-.087	-.210
4	558	-.558	-.375	-.192	-.192	-.026	-.026	-.030	-.082	-.001	-.079	-.005	-.068	-.003	-.070
5	006	-.006	-.058	-.134	-.134	-.014	-.014	-.008	-.081	-.026	-.072	-.126	-.091	-.016	-.082
6	324	-.324	-.102	-.075	-.075	-.032	-.032	-.056	-.030	-.017	-.023	-.020	-.002	-.016	-.011
7	104	-.104	-.287	-.020	-.020	-.014	-.014	-.008	-.011	-.010	-.003	-.002	-.012	-.002	-.016
8	104	-.104	-.287	-.020	-.020	-.014	-.014	-.008	-.011	-.010	-.003	-.002	-.012	-.002	-.016
9	122	-.122	-.166	-.017	-.017	-.004	-.004	-.013	-.017	-.016	-.008	-.009	-.006	-.003	-.005
10															
X	N	012-LOWER CPREAL	012-LOWER CPIMAG	062-LOWER CPREAL	062-LOWER CPIMAG	148-LOWER CPREAL	148-LOWER CPIMAG	261-LOWER CPREAL	261-LOWER CPIMAG	392-LOWER CPREAL	392-LOWER CPIMAG	530-LOWER CPREAL	530-LOWER CPIMAG	661-LOWER CPREAL	661-LOWER CPIMAG
1	2	.127	-.420	-.425	-.425	-.351	-.351	11.011	1.550	7.388	-.641	4.476	-.162	3.131	-.099
2	108	.108	-.207	-.056	-.056	-.110	-.110	-.017	-.255	-.015	-.215	-.112	-.252	-.120	-.250
3	094	-.094	-.069	-.073	-.073	-.000	-.000	-.108	-.049	-.168	-.029	-.105	-.060	-.103	-.058
4	030	-.030	-.082	-.084	-.084	-.117	-.117	-.113	-.042	-.336	-.104	-.128	-.035	-.121	-.079
5	014	-.014	-.010	-.002	-.002	-.010	-.010	-.009	-.025	-.025	-.008	-.014	-.002	-.014	-.006
6	017	-.017	-.013	-.015	-.015	-.002	-.002	-.017	-.006	-.002	-.005	-.007	-.002	-.008	-.007
7	001	-.001	-.009	-.008	-.008	-.002	-.002	-.017	-.006	-.002	-.005	-.007	-.002	-.008	-.007
8															
9															
10															
X	N	012-UPPER CPREAL	012-UPPER CPIMAG	062-UPPER CPREAL	062-UPPER CPIMAG	148-UPPER CPREAL	148-UPPER CPIMAG	261-UPPER CPREAL	261-UPPER CPIMAG	392-UPPER CPREAL	392-UPPER CPIMAG	530-UPPER CPREAL	530-UPPER CPIMAG	661-UPPER CPREAL	661-UPPER CPIMAG
1	1	.872	-.076	-.079	-.079	-.727	-.727	-.405	-.062	-.161	-.243	-.003	-.138	-.003	-.138
2	127	.127	-.226	-.290	-.290	-.186	-.186	-.283	-.025	-.055	-.182	-.146	-.209	-.146	-.209
3	086	-.086	-.044	-.042	-.042	-.109	-.109	-.138	-.079	-.090	-.035	-.061	-.071	-.061	-.071
4	007	-.007	-.067	-.068	-.068	-.029	-.029	-.101	-.077	-.113	-.022	-.116	-.052	-.116	-.052
5	009	-.009	-.009	-.021	-.021	-.035	-.035	-.036	-.014	-.008	-.018	-.013	-.012	-.013	-.015
6	007	-.007	-.009	-.020	-.020	-.008	-.008	-.025	-.009	-.004	-.005	-.003	-.003	-.003	-.003
7	007	-.007	-.009	-.020	-.020	-.008	-.008	-.025	-.009	-.004	-.005	-.003	-.003	-.003	-.003
8	007	-.007	-.009	-.020	-.020	-.008	-.008	-.025	-.009	-.004	-.005	-.003	-.003	-.003	-.003
9	007	-.007	-.009	-.020	-.020	-.008	-.008	-.025	-.009	-.004	-.005	-.003	-.003	-.003	-.003
10															

MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 180 ALPHA-MCL = 6.0 PDP RUN-PT 35.01
 RUN 35 ALPHA-PAR = 2.0 O-COMP = 324.82
 POINT 1 SIGMA = 180.0 V-REF = 199.86
 COMPUTED FREQUENCY = 9.07, K = .0713
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	26	.620	171.76	7.195	140.01	4.669	133.32	2.872	187.20	2.996	188.50	2.946	188.39	2.704	189.25
2	1	.666	183.72	.371	318.21	.179	308.33	.203	299.12	.175	277.84	.242	255.82	.256	297.33
3	4	.098	253.12	.314	318.25	.063	308.05	.088	351.95	.079	341.16	.155	334.95	.070	321.41
4	5	.088	196.59	.242	222.94	.070	212.05	.145	213.87	.119	217.03	.068	215.74	.142	215.36
5	6	.058	119.42	.123	322.73	.170	346.25	.031	104.94	.034	318.56	.126	335.86	.026	327.65
6	7	.119	120.49	.076	322.73	.033	346.25	.057	116.43	.018	328.90	.027	327.52	.026	327.65
7	8	.432	187.91	.016	163.68	.016	163.68	.021	276.46	.017	289.02	.011	175.28	.006	121.55
8	9	.105	53.51	.021	125.13	.016	163.68	.021	5.35	.017	153.15				
9	10	.206	53.51												

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	2	.165	191.37	1.746	194.12	1.383	195.40	1.024	357.14	7.416	355.04	4.479	357.92	3.133	358.19
2	3	.235	157.64	.252	160.22	.251	165.48	1.755	273.71	1.113	286.10	.275	290.62	.277	295.71
3	4	.104	30.27	.111	30.60	.111	295.96	.112	267.34	.120	350.01	.121	295.91	.118	295.71
4	5	.089	93.33	.074	30.60	.064	90.17	.118	167.41	.150	350.01	.046	295.91	.042	295.71
5	6	.140	215.94	.146	214.94	.138	212.40	.027	195.89	.110	250.98	.145	207.57	.140	213.03
6	7	.031	6.73	.033	4.17	.033	3.10	.027	211.81	.040	210.95	.014	207.57	.014	213.03
7	8	.016	299.56	.020	311.19	.016	304.98	.017	335.01	.026	16.72	.013	332.84	.016	339.39
8	9	.009	95.52	.016	291.66	.009	297.06	.018	342.97	.020	271.54	.009	332.84	.001	340.84
9	10														

X	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
1	1	.873	357.07	1.558	371.10	.730	354.77	.411	350.27	.291	336.43	.138	268.78	.143	268.78
2	3	.242	299.30	.334	320.94	.265	303.04	.284	291.88	.214	286.95	.443	309.82	.443	309.82
3	4	.699	277.38	.733	290.21	.733	303.67	.162	331.77	.190	221.27	.254	309.82	.254	309.82
4	5	.042	99.48	.069	102.67	.029	4.53	.680	217.77	.073	100.92	.058	109.81	.058	109.81
5	6	.134	209.88	.173	209.12	.173	209.12	.127	217.77	.143	213.71	.137	191.77	.137	191.77
6	7	.019	28.72	.034	38.00	.027	18.58	.039	21.73	.037	28.62	.035	191.77	.035	191.77
7	8	.020	331.30	.039	331.58	.027	253.03	.035	315.55	.037	294.38	.019	311.18	.019	311.18
8	9	.011	310.78	.020	276.95	.009	255.62	.012	305.70	.007	304.33	.011	293.73	.011	293.73
9	10	.009	35.78			.018	49.51			.012	93.58				

ORIGINAL DATA IS
 OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

OCW PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 180 ALPHA-WCL = 6.0 PDP RUN-PT 35.01
RUN 125 ALPHA-PAR = 2.0 O-COMP = 32482
POINT 1 SIGMA = 180.0 V-DEF = 199.86
COMPUTED FREQUENCY = 9.07, K = .5713

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	.012		.062		.148		.261		.392		.530		.661	
	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI
1	37	.619	14	.583	8	.536	5	.488	4	.537	4	.470	3	.396
2	1	.559	1	.440	1	.321	1	.261	1	.106	1	.070	1	.038
3	4	.007	1	.475	1	.361	1	.337	1	.065	1	.057	1	.074
4	5	.295	1	.276	1	.069	1	.063	1	.103	1	.051	1	.031
5	5	.371	1	.290	1	.037	1	.043	1	.012	1	.001	1	.022
6	5	.107	1	.115	1	.015	1	.024	1	.008	1	.012	1	.035
7	5	.128	1	.129	1	.022	1	.027	1	.022	1	.001	1	.002
8	5	.133	1	.133	1	.022	1	.027	1	.002	1	.014	1	.004
9	5	.118	1	.104	1	.022	1	.027	1	.002	1	.014	1	.004
10	5	.105	1	.017	1	.015	1	.005	1	.002	1	.013	1	.009

X	.774		.860		.910		.910		.910		.910		.910	
	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI	N	DELCPR DELCPI
1	2	.529	1	.533	1	.331	1	.287	1	.870	1	.570	1	.317
2	2	.066	1	.037	1	.019	1	.017	1	.098	1	.020	1	.020
3	2	.048	1	.005	1	.037	1	.019	1	.143	1	.055	1	.008
4	2	.010	1	.004	1	.015	1	.002	1	.026	1	.008	1	.005
5	2	.006	1	.004	1	.000	1	.000	1	.001	1	.001	1	.003
6	2	.014	1	.001	1	.003	1	.000	1	.001	1	.001	1	.003
7	2	.001	1	.001	1	.001	1	.000	1	.001	1	.001	1	.003
8	2	.001	1	.001	1	.001	1	.000	1	.001	1	.001	1	.003
9	2	.001	1	.001	1	.001	1	.000	1	.001	1	.001	1	.003
10	2	.001	1	.001	1	.001	1	.000	1	.001	1	.001	1	.003

*** WALL PRESSURES, PER RADIAN ***

*** STABILITY PARAMETER ***

*** XI = .0588 ***

WALL NO. W1 W2 W3 W4 W5 W6 W7 W8 W9 W10

GAP FRACTION N CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG CPREAL CPIMAG

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ORIGINAL PAGE IS
OF POOR QUALITY

MODE 1 -- OCWI PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 180 ALPHA-MCL = 6.0 POP RUN-PT 35.01
RUN 35 ALPHA-PAR = 2.0 Q-COMP = 32482
POINT 1 SIGMA = 180. V-REF = 189.86
COMPUTED FREQUENCY = 9.07, K = .0713

FOURIER COEFFICIENTS, AMPLITUDE AND PHASE
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	37.044	357.58	14.597	357.49	8.524	262.18	49	5.986	250.28	4.549	350.03	4.09	4.404	324.52	4.404	6.18
2	37.042	264.14	14.597	264.14	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98
3	37.040	343.76	14.597	343.76	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98
4	37.038	326.12	14.597	326.12	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98
5	37.036	326.12	14.597	326.12	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98
6	37.034	326.12	14.597	326.12	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98
7	37.032	326.12	14.597	326.12	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98
8	37.030	326.12	14.597	326.12	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98
9	37.028	326.12	14.597	326.12	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98
10	37.026	326.12	14.597	326.12	8.524	307.75	49	5.986	300.03	4.549	350.03	4.09	4.404	275.18	4.404	97.98

X	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI	DELCPM	PHI
1	2.553	7.95	1.544	6.81	1.350	9.76	5.872	1.47	5.872	1.47	5.872	1.47	5.872	1.47	5.872	1.47
2	2.553	25.96	1.544	25.96	1.350	204.95	5.872	249.04	5.872	249.04	5.872	249.04	5.872	249.04	5.872	249.04
3	2.553	179.08	1.544	179.08	1.350	153.30	5.872	343.78	5.872	343.78	5.872	343.78	5.872	343.78	5.872	343.78
4	2.553	132.55	1.544	132.55	1.350	208.19	5.872	36.64	5.872	36.64	5.872	36.64	5.872	36.64	5.872	36.64
5	2.553	22.20	1.544	22.20	1.350	91.92	5.872	62.66	5.872	62.66	5.872	62.66	5.872	62.66	5.872	62.66
6	2.553	62.05	1.544	62.05	1.350	1.02	5.872	103.33	5.872	103.33	5.872	103.33	5.872	103.33	5.872	103.33
7	2.553	310.97	1.544	310.97	1.350	142.26	5.872	38.79	5.872	38.79	5.872	38.79	5.872	38.79	5.872	38.79
8	2.553	100.77	1.544	100.77	1.350	50.09	5.872	321.44	5.872	321.44	5.872	321.44	5.872	321.44	5.872	321.44
9	2.553	2.11	1.544	2.11	1.350	50.09	5.872	321.44	5.872	321.44	5.872	321.44	5.872	321.44	5.872	321.44
10	2.553	2.11	1.544	2.11	1.350	50.09	5.872	321.44	5.872	321.44	5.872	321.44	5.872	321.44	5.872	321.44

*** WALL PRESSURES, PER RADIAN ***

WALL NO. 125

GAP FRACTION N CP-MAG PHI CP-MAG PHI CP-MAG PHI CP-MAG PHI CP-MAG PHI

1 2.660 320.75 3.342 355.94 3.342 355.94 3.342 355.94 3.342 355.94 3.342 355.94

2 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

3 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

4 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

5 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

6 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

7 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

8 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

9 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

10 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14 3.381 316.14

*** STABILITY PARAMETER

* XI = .0588

ORIGINAL PAGE IS
OF POOR QUALITY

OCWT PERIODICITY TEST
MODE 1 -- CENTER BLADE DATA, ALL STATIONS

FILE 142 ALPHA-MCL = 6.7 PMP RUN PT 35.73
RUV 35 ALPHA-DAB = 2.0 C-COAB = .32361
POINT 3 SIGMA = 18.3 V-DEF = 199.88
COMPUTED FREQUENCY = 15.38, K = .1211
FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, PER RADIUS ***

X	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	-26.557	2.145	-7.304	-7.115	-2.967	-3.234	-2.473
2	3.520	1.155	1.197	1.355	0.041	0.125	0.073
3	1.159	0.654	0.107	0.008	-0.057	0.012	0.007
4	0.635	0.160	0.047	0.043	0.037	0.010	0.005
5	0.286	0.089	0.028	0.071	0.010	0.024	0.045
6	0.087	0.036	0.015	0.020	0.033	0.032	0.004
7	0.027	0.014	0.003	0.015	0.022	0.011	0.004
8	0.017	0.008	0.001	0.008	0.011	0.006	0.013
9	0.002	0.003	0.000	0.004	0.001	0.006	0.006
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X	012-LOWER CPREAL CPIMAG	062-LOWER CPREAL CPIMAG	148-LOWER CPREAL CPIMAG	261-LOWER CPREAL CPIMAG	392-LOWER CPREAL CPIMAG	530-LOWER CPREAL CPIMAG	661-LOWER CPREAL CPIMAG
1	-2.835	1.155	-1.657	1.355	7.004	4.237	2.651
2	0.099	0.654	0.107	0.008	0.041	0.012	0.007
3	0.099	0.160	0.047	0.043	0.037	0.010	0.005
4	0.099	0.089	0.028	0.071	0.010	0.024	0.045
5	0.099	0.036	0.015	0.020	0.033	0.032	0.004
6	0.099	0.014	0.003	0.015	0.022	0.011	0.004
7	0.099	0.008	0.001	0.008	0.011	0.006	0.013
8	0.099	0.003	0.000	0.004	0.001	0.006	0.006
9	0.099	0.000	0.000	0.000	0.000	0.000	0.000
10	0.099	0.000	0.000	0.000	0.000	0.000	0.000

X	012-UPPER CPREAL CPIMAG	062-UPPER CPREAL CPIMAG	148-UPPER CPREAL CPIMAG	261-UPPER CPREAL CPIMAG	392-UPPER CPREAL CPIMAG	530-UPPER CPREAL CPIMAG	661-UPPER CPREAL CPIMAG
1	1.533	2.145	1.197	1.355	0.041	0.125	0.073
2	0.099	0.654	0.107	0.008	0.037	0.010	0.005
3	0.099	0.160	0.047	0.043	0.010	0.024	0.045
4	0.099	0.089	0.028	0.071	0.033	0.032	0.004
5	0.099	0.036	0.015	0.020	0.022	0.011	0.004
6	0.099	0.014	0.003	0.015	0.011	0.006	0.013
7	0.099	0.008	0.001	0.008	0.006	0.004	0.006
8	0.099	0.003	0.000	0.004	0.001	0.006	0.006
9	0.099	0.000	0.000	0.000	0.000	0.000	0.000
10	0.099	0.000	0.000	0.000	0.000	0.000	0.000

MODE 1 -- CCWT PERIODICITY TEST
CENTER BLADE DATA, WALL STRESS

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FILE# 192      ALPHA-CL = 5.00      POP RUN# 1      35.361
RUN 75         ALPHA-PAR = 2.7      V-COMP = 0.32361
POINT 3        SIGMA = 18.7         G-DEF = .90.48
          COMPUTED FREQUENCY = 15.38, K = .1211

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FOUPIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND
COMPUTEDFOUPLIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND
MOMENT, PER RADIANT[illegible][illegible]

*** WALL PRESSURES. PER RADIAN ***

[illegible]

MODE 1 -- 3CWT PERIODICITY TEST
CENTER BLADE DATA, WALL STATIONS

FILE 134 ALPHA-WCL = 6.0 PCP RUN.PI 35.05
 135 ALPHA-RAB = 2.0 G-COMP = 32380
 5 SIGMA = 18.0 V-REF = 139.54
 5 COMPUTED FREQUENCY = 18.97, K = .1492

FOURIER COEFFICIENTS, PEAK & IMAGINARY
 *** BLADE PRESSURES, PER RADIAN ***

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	-26	975	2.157	7.215	312	-4.239	136	-3.021	387	-2.234	535	-3.139	540
2	307	1.519	1.319	1.24	312	1.50	164	1.04	387	1.248	535	1.135	540
3	233	1.585	1.087	1.087	312	1.020	164	1.019	387	1.056	535	1.036	540
4	459	1.346	1.023	1.023	312	1.013	164	1.013	387	1.010	535	1.010	540
5	374	1.020	1.023	1.023	312	1.013	164	1.013	387	1.010	535	1.010	540
6	42	1.020	1.023	1.023	312	1.013	164	1.013	387	1.010	535	1.010	540
7	42	1.020	1.023	1.023	312	1.013	164	1.013	387	1.010	535	1.010	540
8	42	1.020	1.023	1.023	312	1.013	164	1.013	387	1.010	535	1.010	540
9	42	1.020	1.023	1.023	312	1.013	164	1.013	387	1.010	535	1.010	540
10	42	1.020	1.023	1.023	312	1.013	164	1.013	387	1.010	535	1.010	540

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	-2	307	1.566	1.492	563	-1.515	467	1.04	784	7.103	691	4.406	699
2	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699
3	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699
4	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699
5	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699
6	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699
7	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699
8	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699
9	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699
10	307	1.566	1.492	1.492	563	1.021	467	1.04	784	1.118	691	1.067	699

X	N	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER	CPREAL	UPPER
1	714	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
2	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
3	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
4	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
5	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
6	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
7	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
8	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
9	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117
10	638	1.66	1.66	1.66	563	1.546	166	1.04	140	1.21	634	1.173	117

MODE 1 -- OCWI PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 184 ALPHA-MCL = 6.0 POP RUN-PT 35.05
 RUN 35 ALPHA-BAR = 2.0 C-COMP = 32380
 POINT 5 SIGMA = 180. V-REF = 199.54
 COMPUTED FREQUENCY = 18.97, K = .1493
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE
 *** BLADE PRESSURES, PER RADIAN ***

X	N	012-UPPER CP-MAG	012-UPPER PHI	062-UPPER CP-MAG	062-UPPER PHI	148-UPPER CP-MAG	148-UPPER PHI	261-UPPER CP-MAG	261-UPPER PHI	392-UPPER CP-MAG	392-UPPER PHI	530-UPPER CP-MAG	530-UPPER PHI	661-UPPER CP-MAG	661-UPPER PHI
1	27	.061	175.43	7.222	177.52	4.242	181.87	3.046	187.30	2.933	190.51	3.185	189.77	2.904	191.05
1	3	.546	54.59	.433	64.89	.219	46.76	.115	25.50	.059	123.52	.138	19.12	.113	158.73
2	37	.601	153.89	.144	306.89	.065	249.87	.057	251.18	.058	157.20	.046	268.04	.035	260.73
3	4	.674	227.44	.103	50.13	.045	208.90	.037	174.16	.064	167.42	.013	305.38	.042	297.30
4	5	.509	137.24	.090	105.19	.015	333.77	.023	84.67	.010	16.86	.019	302.24	.014	325.57
5	6	.047	334.84	.095	214.68	.019	199.70	.009	100.38	.025	10.37	.014	294.44	.015	112.89
6	7	.115	135.35	.044	311.43	.011	87.82	.014	72.80	.033	217.57	.019	299.60	.024	336.54
7	8	.121	43.14	.025	172.26	.013	117.31	.005	282.68	.007	154.00	.001	339.23	.001	211.49
8	9	.015	63.87	.027	172.26	.013	117.31	.002	143.68	.007	281.15	.001	339.23	.001	211.49
9	10	.042	58.04	.019	290.53	.015	326.67	.018	329.09	.021	331.15	.016	335.35	.006	348.90

X	N	774-UPPER CP-MAG	774-UPPER PHI	060-UPPER CP-MAG	060-UPPER PHI	010-UPPER CP-MAG	010-UPPER PHI	012-LOWER CP-MAG	012-LOWER PHI	062-LOWER CP-MAG	062-LOWER PHI	148-LOWER CP-MAG	148-LOWER PHI	261-LOWER CP-MAG	261-LOWER PHI
1	2	.375	193.78	1.926	197.01	1.584	197.00	12.932	355.89	7.137	354.68	4.406	290.60	2.976	313.31
1	3	.099	5.37	.060	6.23	.076	355.89	.231	262.40	.063	224.49	.196	224.75	.102	313.46
2	3	.058	250.23	.037	253.23	.060	249.29	.103	200.30	.024	44.95	.117	258.61	.036	274.32
3	4	.012	331.84	.037	327.70	.037	89.43	.019	235.47	.027	180.58	.044	211.13	.017	215.35
4	5	.017	394.84	.016	108.99	.018	303.83	.064	70.79	.011	154.11	.029	108.32	.017	215.35
5	6	.017	321.95	.021	336.24	.015	328.59	.060	63.43	.006	124.64	.013	188.32	.012	182.08
6	7	.009	203.73	.011	197.50	.005	193.90	.039	243.75	.004	350.22	.005	124.44	.012	157.88
7	8	.001	64.50	.004	9.91	.002	59.27	.015	351.97	.012	151.85	.005	148.32	.012	160.63
8	9	.000	2.81	.008	68.10	.006	11.90	.028	107.97	.005	199.85	.015	148.32	.012	160.63

X	N	392-LOWER CP-MAG	392-LOWER PHI	530-LOWER CP-MAG	530-LOWER PHI	661-LOWER CP-MAG	661-LOWER PHI	774-LOWER CP-MAG	774-LOWER PHI	860-LOWER CP-MAG	860-LOWER PHI	912-LOWER CP-MAG	912-LOWER PHI
1	1	.722	5.53	1.339	8.82	.577	18.85	.252	33.70	.423	175.38	.209	14.27
1	2	.066	340.11	.037	355.07	.178	21.90	.094	339.21	.120	296.54	.040	214.27
2	3	.093	245.92	.037	127.96	.126	261.86	.046	198.12	.147	124.64	.042	230.23
3	4	.008	189.88	.039	127.96	.023	40.18	.013	25.26	.020	118.80	.031	288.33
4	5	.014	109.08	.016	104.18	.027	245.86	.006	331.04	.010	103.56	.012	107.99
5	6	.009	172.42	.018	168.87	.006	128.86	.013	186.21	.004	160.47	.011	197.62
6	7	.002	136.73	.004	218.34	.012	124.61	.005	185.54	.004	194.68	.010	152.62
7	8	.005	122.95	.007	40.79	.007	14.78	.005	359.74	.012	107.04	.011	156.18
8	9	.005	212.95	.007	246.54	.006	260.88	.007	272.46	.012	304.51	.011	306.05

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OCWT PERIODICITY TEST MODE 1 -- CENTER BLADE DATA, WALL STATIONS

FILE 184 ALPHA-MCL = 6.0 POP RUN-PT 35.05
RUN 35 ALPHA-BAR = 2.0 C-COMP = 32380
POINT 5 SIGMA = 180. V-REF = 199.54
COMPUTED FREQUENCY = 18.97, K = .1493

FOURIER COEFFICIENTS, REAL & IMAGINARY
*** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X =	.012	.062	.148	.261	.392	.530	.661
N	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR
1	37.878	-2.941	14.318	-1.003	8.645	.184	.560
2	-1.081	-3.376	-.671	-.874	-.083	-.343	-.126
3	3.017	-1.666	-.032	-.233	-.033	-.034	-.030
4	.526	-.578	-.099	-.079	-.080	-.069	-.024
5	.353	-.362	-.049	-.078	-.032	-.036	-.016
6	-.021	-.081	-.069	-.059	-.012	-.017	-.009
7	-.109	-.047	-.032	-.038	-.014	-.012	-.005
8	-.126	-.118	-.003	-.004	-.003	-.007	-.002
9	-.008	-.016	-.004	-.005	-.009	-.002	-.001
10	-.031	-.009	-.007	-.022	-.025	-.016	-.006
N	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR
1	37.878	-2.941	14.318	-1.003	8.645	.184	.560
2	-1.081	-3.376	-.671	-.874	-.083	-.343	-.126
3	3.017	-1.666	-.032	-.233	-.033	-.034	-.030
4	.526	-.578	-.099	-.079	-.080	-.069	-.024
5	.353	-.362	-.049	-.078	-.032	-.036	-.016
6	-.021	-.081	-.069	-.059	-.012	-.017	-.009
7	-.109	-.047	-.032	-.038	-.014	-.012	-.005
8	-.126	-.118	-.003	-.004	-.003	-.007	-.002
9	-.008	-.016	-.004	-.005	-.009	-.002	-.001
10	-.031	-.009	-.007	-.022	-.025	-.016	-.006

X =	.774	.860	.910
N	DELCPR	DELCPR	DELCPR
1	2.517	.706	1.431
2	-.011	-.034	-.034
3	-.043	-.019	-.020
4	-.045	-.014	-.011
5	-.031	-.017	-.007
6	-.026	-.009	-.004
7	-.003	-.003	-.002
8	-.004	-.001	-.001
9	-.004	-.004	-.001
10	-.006	-.007	-.012
N	DELCPR	DELCPR	DELCPR
1	2.517	.706	1.431
2	-.011	-.034	-.034
3	-.043	-.019	-.020
4	-.045	-.014	-.011
5	-.031	-.017	-.007
6	-.026	-.009	-.004
7	-.003	-.003	-.002
8	-.004	-.001	-.001
9	-.004	-.004	-.001
10	-.006	-.007	-.012

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	W1	W2	W4	W6	W10
GAP FRACTION	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR
1	2.428	.533	-.133	-.235	10.347
2	-.133	-.210	-.707	-.151	.213
3	-.027	-.166	-.746	-.015	.509
4	-.043	-.024	-.026	-.006	-.240
5	-.006	-.003	-.042	-.010	-.144
6	-.022	-.003	-.025	-.005	-.062
7	-.034	-.005	-.021	-.013	.030
8	-.019	-.033	-.006	-.014	-.040
9	-.034	-.013	-.001	-.001	-.013
10	-.016	-.003	-.002	-.006	-.024
N	DELCPR	DELCPR	DELCPR	DELCPR	DELCPR
1	2.428	.533	-.133	-.235	10.347
2	-.133	-.210	-.707	-.151	.213
3	-.027	-.166	-.746	-.015	.509
4	-.043	-.024	-.026	-.006	-.240
5	-.006	-.003	-.042	-.010	-.144
6	-.022	-.003	-.025	-.005	-.062
7	-.034	-.005	-.021	-.013	.030
8	-.019	-.033	-.006	-.014	-.040
9	-.034	-.013	-.001	-.001	-.013
10	-.016	-.003	-.002	-.006	-.024

*** STABILITY PARAMETER ***

* XI = .1023 *

MODE 1 -- JCHT PERIODICITY TEST CENTER BLADE DATA, WALL STATIONS

FILE 194 ALPHA-MCL = 6.0 PDP RUN-PT 35.05
 RUN 35 ALPHA-PAR = 2.0 Q-COMP = 32.580
 POINT 5 SIGMA = 180. V-CREF = 139.584
 FOURIER COEFFICIENTS, AMPLITUDE AND PHASE ANGLE = 18.97, K = .1493
 *** BLADE PRESSURES, NORMAL FORCE, AND MOMENT, PER RADIAN ***

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI
		.012		.062		.148		.261		.392		.530		.661	
1	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
2	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
3	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
4	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
5	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
6	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
7	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
8	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
9	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47
10	37	.992	355.54	14	.353	352.99	8	.647	5.32	6	.019	255.27	5	.33	3.47

X	N	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	DELCPH	PHI	N	CN-MAG	PHIN	N	CN-MAG	PHIN
=															

*** WALL PRESSURES, PER RADIAN ***

WALL NO.	GAP FRACTION	N	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI	CP-MAG	PHI
			.125		.125		.125		.125		.125		.125	
1	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
2	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
3	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
4	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
5	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
6	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
7	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
8	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
9	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
10	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584

*** STABILITY PARAMETER

* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =	* XI =
1	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
2	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
3	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
4	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
5	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
6	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
7	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
8	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
9	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584
10	2	.486	12.37	3	.557	22.99	4	.582	176.72	5	.584	186.12	6	.584